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ABSTRACT

This report presents results of a study of alcohol and other drug use by Wisconsin students which was conducted in the spring of 1991. A total of 5,834 students were surveyed. Students were from grades 6, 8, 10, and 12, as well as from various community sizes and racial/ethnic groups. In addition to reporting results of the 1991 survey this report compares baseline data from a similar 1989 survey with data from the 1991 survey. Results in these categories are presented: (1) social context; (2) alcohol use; (3) cigarette and smokeless tobacco use; (4) marijuana, cocaine/crack, and amphetamine use; (5) other drug use; (6) categories of problem use; (7) percentage of students at risk; (8) comparisons to national norms; (9) summary of changes on selected measures of alcohol and other drug use, 1989 and 1991; (10) community size differences; (11) school and community resources; and (12) opportunities. A recent national study which identified characteristics of youth and the environments that appear to discourage alcohol and other drug use and other forms of at-risk behavior is summarized. Results are illustrated with tables and graphs. Appendices list 1988-1989 sample characteristics and discuss margin of error. (ABL)

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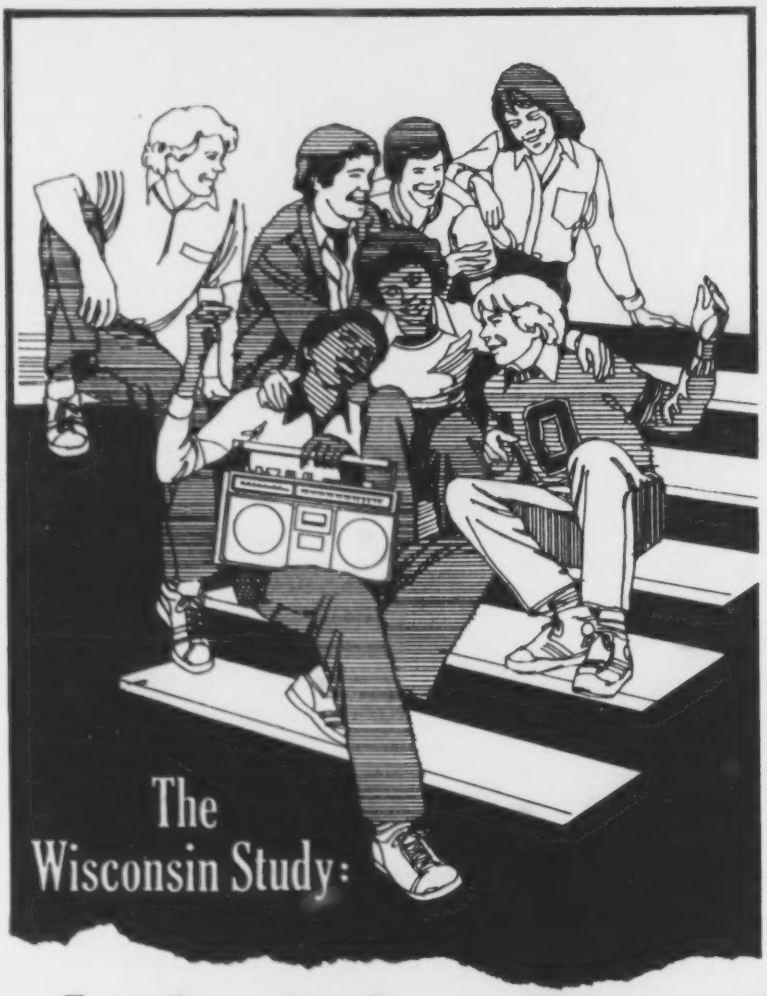

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Alcohol & Other Drug Use

A SEARCH INSTITUTE REPORT
SEPTEMBER 1991

Wisconsin Department of Public Instruction/Herbert J. Grover, State Superintendent
Wisconsin Department of Health and Social Services/Gerald Whitburn, Secretary

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FOREWORD

What is the situation regarding alcohol and other drug use by Wisconsin youth? What are the emerging trends?

To answer these questions, the state's departments of Public Instruction (DPI) and Health and Social Services (DHSS) arranged to survey a sampling of Wisconsin students during the spring of 1991. The agencies had used information from an earlier survey to formulate goals for programs addressing alcohol and other drug abuse (AODA). It was an appropriate time to determine if any changes had occurred in the patterns of use from the previous study.

In keeping with the agencies' commitment to interagency cooperation in addressing drug abuse, the latest survey was among many joint projects between DPI and DHSS. The report that follows presents results from the survey. It also provides solid information about the relationship nearly 6,000 Wisconsin students have with alcohol and other drugs.

The students surveyed reside in communities with populations ranging from fewer than 2,500 to more than 250,000. Researchers examined their responses collectively and as a function of population.

The survey results tell us what percentage of those students--grades 6, 8, 10, and 12--are or have been involved with drugs, when and where, and what drugs they've used. The results also define the environment that surrounds these youth, providing a look at family and school resources and alcohol and other drug use elsewhere in the nation.

In addition to reporting results of the 1991 survey, this report compares baseline data from a similar 1989 survey

with data from the 1991 survey. The results will help guide our course regarding statewide needs.

The information contained in this report can provide school and community leaders with a statewide perspective as they strive to address local needs. For additional information about the survey or AODA resources, contact DPI's Bureau for Pupil Services at (608) 266-8960 or DHSS's Office of Alcohol and Other Drug Abuse at (608) 266-2717.

Herbert J. Grover, Superintendent
Department of Public Instruction

Gerald Whitburn, Secretary
Department of Health and
Social Services

1991

ACKNOWLEDGMENTS

The Wisconsin Study: Alcohol and Other Drug Use reports the results of a survey conducted in 118 Wisconsin schools. The state's departments of Public Instruction (DPI) and Health and Social Services (DHSS) commissioned the survey, which was developed, administered, and reported by Search Institute, Minneapolis, Minnesota.

Developing and administering the survey required the help of DPI and DHSS staff members, the state's 12 cooperative education service agencies (CESAs), the participating schools, and nearly 6,000 students.

The contribution of each organization represents the efforts of many individuals. Michael Thompson, chief of DPI's Alcohol and Other Drug Abuse Section, and Vince Ritacca, section chief in charge of program resources and development in DHSS's Office of Alcohol and Other Drug Abuse, spearheaded the project. Nancy F. Holloway, director of DPI's Bureau for Pupil Services, and Larry Monson, director of DHSS's Office of Alcohol and Other Drug Abuse, provided guidance.

Steve Fernan, AODA consultant, served as DPI's liaison to Search Institute, and Michael Quirke, program evaluation coordinator for DHSS, worked on the study design with DPI and DHSS staff members.

Kathleen Paus and Gail Endres, from DPI's Publications and Communication Services Section, helped complete and print the document.

The report is written by Dr. Peter L. Benson and Carolyn H. Eklin of Search Institute. Other contributors from Search

Institute are Marilyn J. Erickson, Rick G. Trierweiler, Dr. Dale A. Blyth, Kim M. Hanson, and Dr. Michael J. Donahue.

I. HIGHLIGHTS

In the spring of 1991, a stratified random sample of 5,834 public school students in grades 6, 8, 10, and 12 participated in a second Wisconsin statewide study of alcohol and other drug use and non-use. The first study, using the same design, was conducted in 1988-89. Unless specified, the numbers that follow are from the 1991 study.

Social Context: Family, Friends, and School

• One-fourth of 8th graders report that their parents have never tried to talk with them about alcohol and other drugs.

• More than half (53%) of 8th graders who say they drink report their parents never know when they have been drinking.

• Students in all grades are more likely in 1991 to feel comfortable talking to their parents about alcohol and other drug concerns than was true in 1989.

• Between 1989 and 1991, students' liking for school has decreased in grades 6, 10, and 12. The drop is more pronounced for females than males.

• For all grade levels, percentages of students reporting 6 or more hours of homework have decreased, the most precipitous drop occurring in grades 10 and 12.

• Percentages of students reporting they have had a course that spent "a lot of time on alcohol and other drugs" have increased between 1989 and 1991 in all grades except 12.

Alcohol Use

• In 1991, more than half of students in each grade have used alcohol once or more in their lifetime, with rates ranging from 55 percent for 6th graders to 94 percent for seniors.

• 61 percent of seniors have used alcohol once or more in the "last 30 days."

• More than one-fourth of sophomores and one-third of seniors report binge drinking (5 or more drinks in a row), once or more, in the "last 2 weeks."

• In the "last 12 months," 4 out of 10 seniors report driving a vehicle after drinking alcohol.

Tobacco Use

• 12 percent of seniors smoke one-half pack or more of cigarettes per day.

• Across all grades, females are more likely than males to smoke cigarettes, both in the "last 30 days" and in the "last 2 weeks."

• 10 percent of seniors have used smokeless tobacco in the "last 30 days."

Other Drug Use

• Lifetime marijuana use, once or more, ranges from 3 percent in grade 6 to 34 percent in grade 12; the greatest increase occurs between grades 8 and 10.

• Lifetime cocaine use, once or more, ranges from 1 percent in grade 6 to 6 percent in grade 12.

• Lifetime marijuana use, once or more, has decreased among seniors between 1989 and 1991, from 42 percent to 34 percent.

• 40 percent of 12th graders report using an illicit drug at least once. Illicit drug use was defined as having used, once or more without a doctor's prescription, one or more of these drugs: marijuana, cocaine, amphetamines, LSD, PCP, heroin, other narcotics, methaqualone, barbiturates, or tranquilizers.

• 12 percent of 6th graders report at least one use of an inhalant.

Categories of Problem Use

• 43 percent of seniors are categorized as a "problem drinker," "problem drug user," or both. See chapter 8 for descriptions of these categories.

• 33 percent of sophomores fall into one of these three problem-use categories.

• Overall, rates for problem alcohol and/or other drug use have not changed meaningfully between 1989 and 1991.

Comparisons to National Norms

• Compared to a nationally representative sample of high school seniors, Wisconsin seniors are **more** likely to use alcohol, **as** likely to smoke cigarettes, and **less** likely to use illicit drugs.

• Compared to recent but unrepresentative national data on 6th graders, Wisconsin 6th graders are **more** likely to use alcohol.

Summary of Changes between 1989 and 1991

• The most systematic change in alcohol and other drug use occurs among 12th graders, with decreases seen on 5 of 9 measures.

• While some success in prevention has occurred among students in grades 8, 10, and 12, no positive changes are seen among students in grade 6.

Community Size Differences

• Overall, student alcohol use is lowest in cities/suburbs with a population of 50,000-250,000 and highest in communities of under 2,500.

• Lifetime marijuana use is lowest in communities of 2,500-9,999 (13%) and twice as high in cities/suburbs of over 250,000 (26%).

Resources

• 1991 students tend, overall, to have greater knowledge of school and community resources than their 1989 counterparts.

II. INTRODUCTION

Background of the Study

In the 1988-89 school year, a Wisconsin statewide study of student alcohol and other drug use was conducted by Search Institute in collaboration with the Department of Public Instruction. A random sample of public school students in grades 6, 8, 10, and 12 was selected for the study, and a comprehensive report issued in April, 1989.

In the spring of 1991, a second Wisconsin statewide study was done, using the same sampling frame, grade levels, and survey (*Search Institute Profiles of Student Life: Alcohol and Other Drugs*). The Department of Health and Social Services joined the Department of Public Instruction for this second study. Michael Thompson, Steve Fernan, and Vincent Ritacca directed the project within the state.

As in the prior study, the sample of students was stratified by geographical region and district enrollment size. Within selected schools, classrooms were randomly chosen to yield school samples matching the number of students dictated by the sampling frame.

CESA (Cooperative Educational Service Agency) coordinators in the 12 CESA regions administered surveys in a total of 118 schools. Carolyn Eklin of the Search Institute staff provided training for the coordinators. Of the 125 schools invited to participate in the study, 2 were replaced and only 5 did not participate. The 96 percent school participation rate reflects excellent cooperation on the part of Wisconsin schools in this important study.

District administrators and building principals were provided with a sample letter to parents regarding the purposes of the study, to be used at their discretion. A detailed administration manual standardized the survey process and guided the survey administration. Precautions were taken to assure students of confidentiality and anonymity.

A total of 5,945 students completed the survey forms. Of this number, data from 111 students (1.9%) were discarded due to one or more of the following reasons: missing data on 40 or more questions, inconsistent responding, or reports of unrealistically high use of alcohol and/or other drugs (e.g., daily use of multiple drugs).

Characteristics of the final sample of 5,834 used in this report are presented in Figure 1. (To compare these characteristics with those of the 1988-89 study, see Appendix A; note that the two samples are very similar on all dimensions.)

Data Quality

Data checks on response patterns revealed that few students reported unrealistically high levels of alcohol and other drug use or responded inconsistently on multiple items measuring the same variable. For example, a response option for two questions at different points in the survey was "I never drink." In these two different contexts, percentages for students at each grade level were either exactly the same or within one to three percentage points of each other. An additional factor contributing to data quality was inherent in the study design, which mandates procedures to ensure student confidentiality, thereby encouraging honest answers. Surveys were collected immediately after survey administration, placed in a prepared envelope, and sealed for

Figure 1: Wisconsin Sample Characteristics

	Sample Size	Percent (%) of Total Sample
Total	5,834	100
Grade*		
6	1,553	27
8	1,437	25
10	1,365	23
12	1,479	25
Gender*		
Male	2,954	51
Female	2,852	49
Community Size*		
Under 2,500	1,937	34
2,500 - 9,999	711	12
10,000 - 49,999	1,054	18
50,000 - 250,000 (medium city and suburbs)	1,161	20
Over 250,000 (large city and suburbs)	927	16
Race/Ethnicity*		
American Indian	118	2
Asian or Pacific Islander	78	1
Black or African American	391	7
Latino or Hispanic	127	2
White	5,015	86
Bi-racial or bi-cultural	69	1

*Total may not sum to 5834 due to missing data.

Search Institute, 1991

mailing to Search Institute. Thus there is reason to believe the data reported here are of high quality.

Report Organization

In this report, percentages, rounded to the nearest whole number, are reported by students' grade and gender. Each of the next 11 sections contains text describing key findings and graphics presenting the data. Comparisons to data from the 1988-89 study are given at the end of the major sections and are summarized in chapter 11.

Chapters 14 and 15 conclude the report, offering additional information from the findings and exploring the interrelationship of the factors delineated in the study. The role of these multiple factors in the prevention of alcohol and other drug abuse is placed in the context of the external and internal assets youth need for positive development.

The Technical Appendix provides information about confidence intervals in the study. As a rule of thumb, differences of 5 percent or more between grade levels should be considered meaningful differences even though smaller differences may be statistically significant.

III. SOCIAL CONTEXT: FAMILY, FRIENDS, AND SCHOOL

A student's family, friends, and school are important resources in the prevention of alcohol and other drug abuse. This section looks at how students view parental supervision and communication, friends' use/non-use of alcohol and other drugs, and school issues such as homework, participation in structured extracurricular activities, and educational aspirations.

Major findings are summarized below.

Parenting (Figures 2 and 3)

• More than three-fourths of students in grades 6, 8, and 10 report that, "most" or "all of the time," their parents ask them where they're going or with whom they will be. Females (81%) are more likely than males (72%) to report this kind of parental monitoring.

• One-fourth of 8th graders report that their parents have never tried to talk with them about alcohol and other drugs. The percentages are almost as great for students in the other grades: 6th and 10th grades = 23 percent, 12th = 22 percent.

• Fewer than two-thirds of students in each grade say they would feel "somewhat" or "very comfortable" bringing up a question or concern about alcohol and other drugs with their parents. Females (63%) are more likely than males (54%) to report this level of comfort in using parents as resources.

Figure 2: Family

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Parental Monitoring						
How much of the time do your parents ask you where you are going or with whom you will be?						
Most or **all** of the time	77	77	81	72	72	81
Communication						
How many times has one (or both) of your parents tried to talk with you about drugs and alcohol?						
Never	23	25	23	22	22	24
Once	13	16	14	14	15	14
2-5 times	33	35	41	39	37	37
6 or more times	31	24	22	25	26	25
If you had an important question or concern about drugs or alcohol, how comfortable would you feel about bringing it up with your parent(s) or guardian?						
I'd feel **somewhat** or **very** comfortable	61	56	55	61	54	63
Awareness of Drinking						
How often do you think your parents know when you have been drinking? (Percentages reflect only those students who say they drink.)*						
My parents never know	34	53	47	33	41	43
My parents sometimes know	13	20	30	36	29	26
My parents know **most of the time** or **always**	52	27	22	30	30	31

* Note: These percentages are not directly comparable to percentages for this item in the 1988-1989 study.

Based on survey items 15, 106-108

Search Institute, 1991

• More than one-half (53%) of the 8th graders who say they drink report that their parents never know when they have been drinking.

• Students' perceptions that their parents would be upset if they found out they had been drinking decrease significantly as grade level increases. Whereas 82 percent of 6th graders report parental upset, only 43 percent of 12th graders do so (Figure 3). This view that alcohol use would upset the student's parent(s) is one of the strongest predictors of students' non-use of alcohol and other drugs.

•For other drug use, high percentages of students in all grades (94% or more) perceive that their parents would be upset if they came home from a party and their parents found out they had been using illegal drugs such as marijuana or cocaine.

Friends (Figure 4)

• One in 3 seniors reports that most or all of his/her close friends drink alcohol once a week or more, and nearly 1 in 4 reports that friends smoke cigarettes on a regular basis.

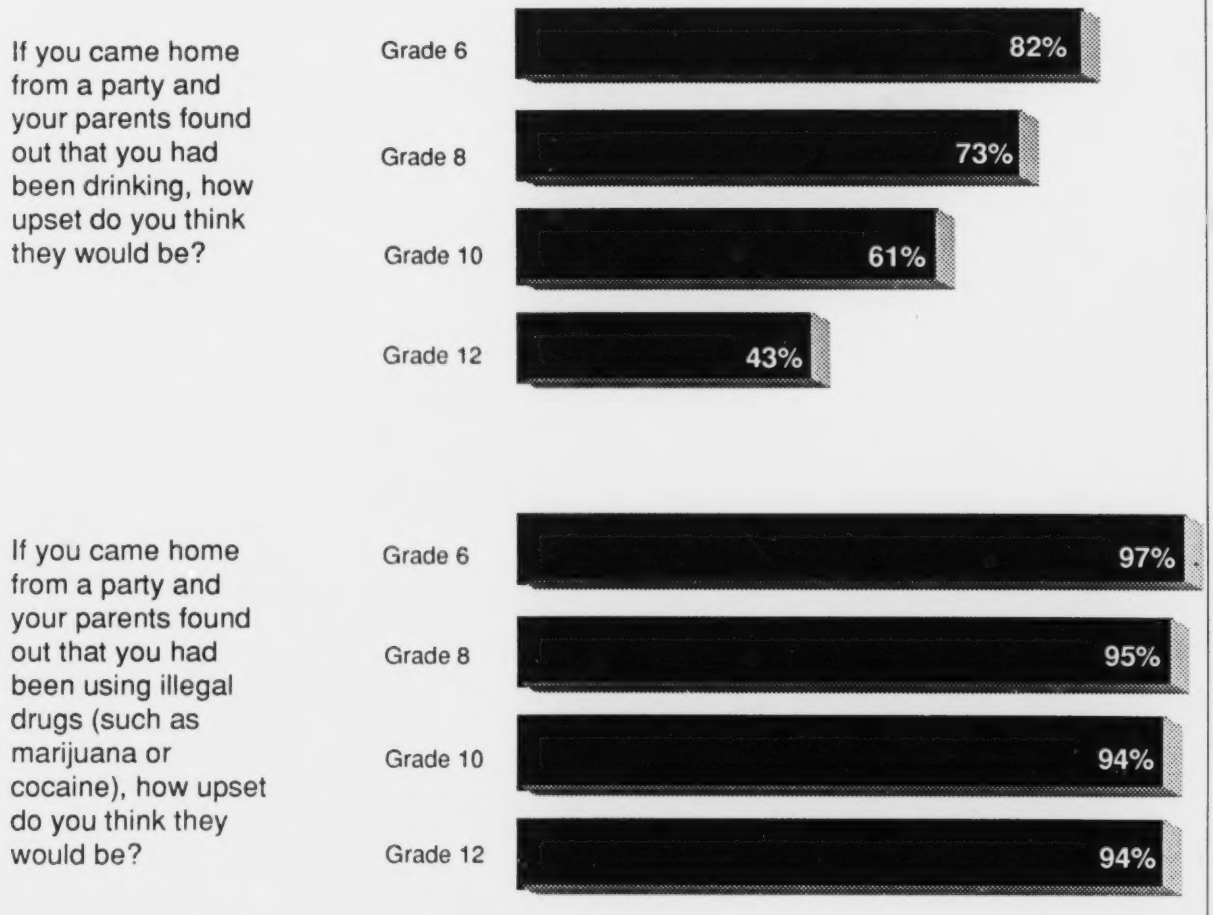
• Between 6th and 12th grades, there is a sixteenfold increase in the number of students who report that friends drink alcohol once a week or more or have used marijuana, and a sevenfold increase in the number who smoke cigarettes on a regular basis.

School and Use of Time (Figure 5)

• Males are less likely than females to report liking school "quite a lot" or "very much." Across all grades, only a minority of students affirm school in this way.

Figure 3: Parental Reaction to Drinking/Using Drugs

Percentage of students reporting parents would be **very** or **extremely** upset


If you came home from a party and your parents found out that you had been drinking, how upset do you think they would be?
Grade 6
82%
Grade 8
73%
Grade 10
61%
Grade 12
43%
If you came home from a party and your parents found out that you had been using illegal drugs (such as marijuana or cocaine), how upset do you think they would be?
Grade 6
97%
Grade 8
95%
Grade 10
94%
Grade 12
94%

Based on survey items 16, 78

Search Institute, 1991

Figure 4: Friends' Use of Alcohol or Other Drugs

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Most or **all** close friends . . .						
Smoke cigarettes on a regular basis	3	9	17	23	12	14
Drink alcohol once a week or more	2	8	22	33	17	16
Have used marijuana or hashish	1	4	10	16	8	7
Have used cocaine (coke, snow, rock, crack)	*	1	1	1	1	1

* = Less than 1 percent
Based on survey item 81

Search Institute, 1991

Figure 5: School and Use of Time

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
How do you feel about going to school?						
Like school **quite a lot** or **very much**	33	30	28	30	26	34
In an average week, about how many hours do you spend doing homework?						
0 hours	6	7	8	8	11	3
1-5 hours	75	70	66	65	70	68
6 hours or more	19	23	26	28	19	29
Participation in the following, 1 or more hours per week:						
• Music (band, choir, orchestra, lessons)	62	51	35	29	35	54
• Sports at school	53	59	55	42	57	47
• Clubs/organizations at school	26	32	32	45	26	41
• Clubs/organizations, non-school	70	66	58	59	65	61
TV watched on average school day, 3 or more hours	52	52	38	27	46	38
Educational aspirations after high school						
• Trade or vocational school	3	8	22	24	17	12
• College	49	50	48	50	50	49
• Post graduate	32	26	17	16	17	29

Based on survey items 6 - 8, 96, 98

Search Institute, 1991

• The measure 'hours spent doing homework' (6 or more) increases with grade, but only a minority of students in each grade do 6 or more hours in an average week.

• Percentages of student participation in four kinds of structured extracurricular activities vary considerably by grade. Involvement in music activities one or more hours a week, for example, decreases dramatically with grade. Whereas 62 percent of 6th graders participate in band, choir, orchestra, or music lessons, only 29 percent of seniors do. Females are much more likely to have music involvement than are males.

• While participation in school clubs and organizations tends to increase across grade levels (26% to 45%), participation in non-school clubs and organizations decreases (70% to 59%).

• More than one-half of 6th and 8th graders watch television 3 or more hours on an average school day.

• About one-half of students in each grade report they would like to attend college; the percentage who want to go on to post-college education decreases by grade level (32% to 16%).

Exposure to Drug Education at School (Figure 6)

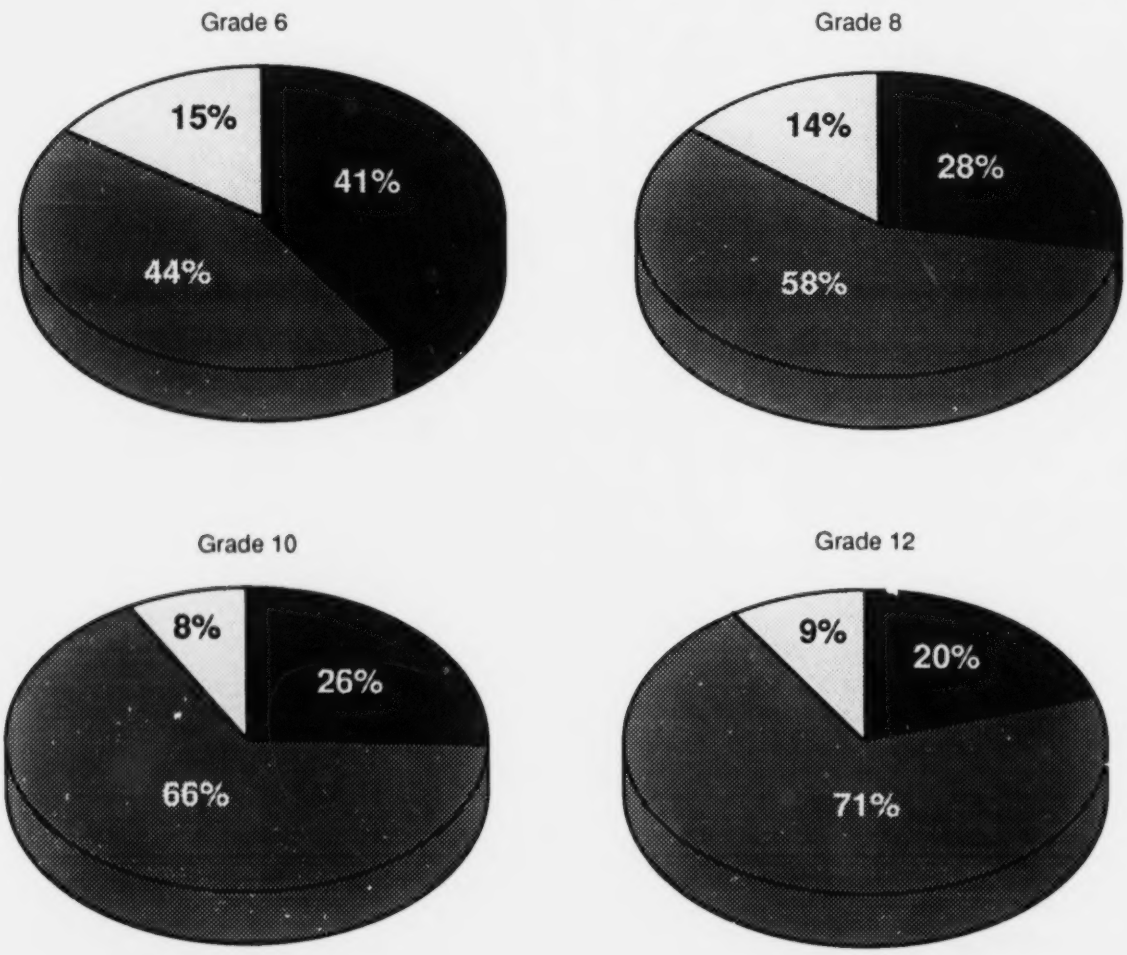
• Across all grades, more than two-thirds of students report having had a course in school that spent "a lot of time" or "some time" on alcohol and other drugs and how they affect people.

Figure 6: Exposure to Courses at School on Alcohol and Other Drugs

Had a course that spent **a lot of time** on drugs and alcohol

Had a course that spent **some** or **a little time** on drugs and alcohol

Have never had a course teaching about drugs and alcohol



Based on survey item 99

Search Institute, 1991

Comparisons of Social Context, 1989 and 1991 (Figure 7)

In this and subsequent comparisons of 1989 and 1991 data, there is a possibility that the time of year for survey administration may account, in small part, for the differences noted. Whereas the bulk of the 1988-89 study occurred in late fall, the 1991 study was conducted in the spring. One could speculate, for example, that students' levels of homework may not be as high in the spring. Nevertheless, grade trends throughout the study, seen in the percentage intervals, would seem to indicate that this factor plays a very minor role.

• 1991 seniors are less likely than their 1989 counterparts to report parental monitoring.

• Students in all grades (1991) are more likely to feel comfortable talking with their parent(s) about alcohol and other drug concerns.

• The degree to which students report liking school "quite a lot" or "very much" has dropped significantly across all grades except 8th; the drop is most pronounced for females.

• For all grade levels, percentages of students reporting 6 or more hours of homework has decreased, the most precipitous drop occurring in grades 10 and 12.

• Percentages of students reporting they have had a course that spent a lot of time on alcohol and other drugs has increased in all grades except 12.

Figure 7: Comparisons of Social Context, 1989 and 1991[1]

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Parental monitoring						
1989	76	76	80	77	72	83
1991	77	77	81	72	72	81
Comfort in talking with parent(s) about alcohol and other drug concerns						
1989	56	52	54	57	50	60
1991	61	56	55	61	54	63
Parental reaction to drinking						
1989	82	74	61	44	62	67
1991	82	73	61	43	62	68
Liking for school						
1989	40	29	34	39	30	41
1991	33	30	28	30	26	34
6 or more hours homework						
1989	23	27	36	39	27	36
1991	19	23	26	28	19	29
Participation in clubs or organizations at school						
1989	24	31	37	46	28	42
1991	26	32	32	45	26	41
Have had course that spent a lot of time on alcohol and other drugs						
1989	28	24	22	22	24	24
1991	41	28	26	20	29	29

[1] See figures 2, 3, 5, and 6 for item content.

Search Institute, 1991

IV. ALCOHOL USE

In assessing alcohol use, students were asked about "lifetime," "last 12 months," "last 30 days," and "last 2 weeks" use. A drink was defined as a glass of wine, a bottle or can of beer, a shot glass of liquor, or a mixed drink.

Below are some key findings.

Frequency of Alcohol Use (Figure 8)

• On all measures of alcohol use, the rate rises with increase in grade.

• More than half of students in each grade have used alcohol once or more in their lifetime, with rates ranging from 55 percent for 6th graders to 94 percent for seniors. Thirty-seven percent of seniors have used alcohol 40 or more times.

• Nearly 1 in 2 seniors has used alcohol in the "last 2 weeks," with more than 1 in 5 reporting use 3 or more times in that period.

• Five or more drinks in a row, last 2 weeks, is commonly called the "intoxication" or "binge drinking" rate. On this measure, 1 in 10 students in grade 6 report one or more such experiences. More than one-fourth of sophomores and one-third of seniors report binge drinking.

• On the "once or more" measures, males and females tend to have similar percentages. However, on the intoxication measure, the rate for males is significantly greater than that for females.

Figure 8: Alcohol Use

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Lifetime						
Once or more	55	75	87	94	78	77
40 or more times	3	8	23	37	20	15
Last 12 months						
Once or more	31	55	74	84	60	61
20 or more times	1	4	16	28	13	11
Last 30 days						
Once or more	14	30	49	61	38	37
3 or more times	4	12	26	38	21	18
Last 2 weeks						
Once or more	9	21	36	49	30	27
3 or more times	2	6	14	22	13	9
Five or more drinks in a row in the last 2 weeks						
Once or more	11	16	27	37	26	20
3 or more times	2	5	11	18	11	7

Based on survey items 9 - 13

Search Institute, 1991

• Although not shown on the figure, the percentages of students who report never drinking are as follows: grade 6 = 65 percent, grade 8 = 47 percent, grade 10 = 28 percent, and grade 12 = 19 percent.

Grade When Alcohol Was First Used (Figure 9)

• Greater percentages of students in the earlier grades than in the later grades, and greater percentages of males than females, report that they first drank more than just a few sips of alcohol in grade 5 or earlier.

• Out of all the students in grade 6, more than one-fourth report that they used alcohol in grade 5 or earlier.

Alcohol Use, Settings and Sources (Figure 10)

• Students were asked how often in the past year they used alcohol when alone, at a party, at home, in a car, and before, during, or after school. For all students, the most frequent use was at a party or at home. A majority of sophomores (62%) and seniors (75%) used alcohol at a party.

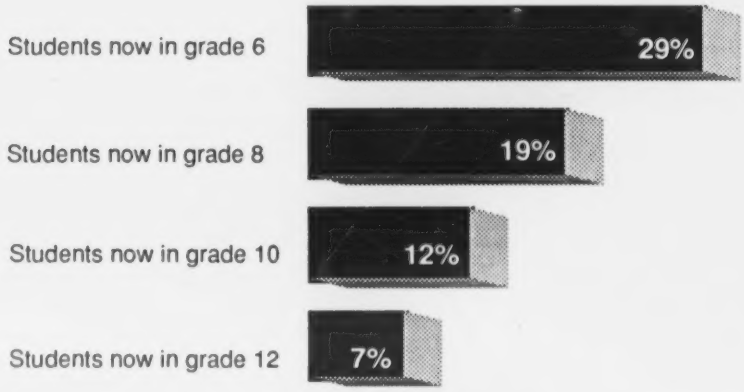
• Percentages for males and females are nearly the same on using alcohol on more than one occasion in each of these situations.

• Ten percent of sophomores and 13 percent of seniors report drinking before or during school.

• Of those students who say they drink, the largest percentages of 6th and 8th graders report that they get the alcohol they drink from their parents' alcohol at home (76% and 59%, respectively).

Figure 9: First Use of Alcohol

Percentage of all students in each grade reporting that they first drank more than just a few sips of alcohol in grade 5 or earlier



Based on survey item 19: When was the first time (if ever) you drank more than just a few sips of alcohol (beer, wine, or liquor)?

Search Institute, 1991

Figure 10: Alcohol Use, Settings and Sources

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
During the last year, how often (if ever) did you use alcohol in each of the following situations? (percentage reporting use on more than one occasion)						
• Alone	9	19	24	24	21	18
• Party	23	41	62	75	50	50
• Home	27	38	46	49	40	39
• Car	3	8	23	32	16	17
• School (before or during)	2	7	10	13	8	7
• School (after)	1	5	10	18	10	7
Where do you get the alcohol you drink? (Students marked each answer that was true for them; percentages reflect only those students who say they drink.)*						
• From home, parents' alcohol	76	59	43	33	47	49
• From friends, own age	26	53	64	63	52	60
• From store, buy it	1	4	11	21	14	9
• From bar, tavern	6	7	9	21	14	10
• From someone of legal age, ask to get it	12	30	54	60	44	46

* Note: These percentages are not directly comparable to percentages for these items in the 1988-89 study.
Based on survey items 14, 17

Search Institute, 1991

• In contrast, the largest percentages of 10th and 12th grade students who drink report that they get alcohol from friends their own age (64% and 63%, respectively).

Alcohol and Driving/Riding Patterns (Figure 11)

• In the "last 12 months," 4 out of 10 seniors report driving a car, truck, motorcycle, or ATV one or more times after drinking alcohol. Rates for males are significantly greater than for females.

• On average, riding in a vehicle driven by someone who had been drinking alcohol was reported by about one-half of all students.

Comparisons of Alcohol Use, 1989 and 1991 (Figure 12)

• On lifetime, annual (not shown), last 30 days, and last 2 weeks alcohol use, 1991 percentages for students in grades 8, 10, and 12 tend to be less than 1989 percentages. (But, as shown in chapter 11, these differences tend not to be statistically significant.) On all these measures, percentages are slightly elevated for 6th graders.

• On the intoxication measure (5 or more drinks in a row, last 2 weeks), 1991 percentages are similar to 1989 percentages, with these two exceptions: "Once or more" use for 6th graders has increased from 8 percent to 11 percent and "three or more times" use for 12th graders has increased from 14 percent to 18 percent.

• Percentages of 8th and 12th graders reporting first alcohol use in grade 5 or earlier has decreased.

Figure 11: Alcohol and Driving/Riding Patterns

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Within the last 12 months, how many times (if any) have you driven a car, truck, motorcycle, or ATV (all-terrain vehicle) after drinking alcohol?						
Never	93	90	85	60	78	86
1-5 times	5	7	12	28	14	11
6 times or more	2	3	3	12	7	3
Once or more	7	10	15	40	22	14
Within the last 12 months, how many times (if any) have you ridden in a vehicle driven by someone who had been drinking alcohol?						
Never	64	52	42	38	52	46
1-5 times	27	36	42	42	33	40
6 times or more	9	12	16	19	15	13
Once or more	36	48	58	62	48	54

Based on survey items 93, 94

Search Institute, 1991

Figure 12: Comparisons of Alcohol Use, 1989 and 1991[1]

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Alcohol Use						
Lifetime						
1989	53	78	91	94	81	78
1991	55	75	87	94	78	77
Last 30 days						
1989	11	31	52	62	41	39
1991	14	30	49	61	38	37
Last 2 weeks						
1989	7	20	39	51	31	29
1991	9	21	36	49	30	27
Five or more drinks in a row, last 2 weeks, once or more						
1989	8	16	28	37	26	20
1991	11	16	27	37	26	20
Five or more drinks in a row, last 2 weeks, 3 or more times						
1989	2	4	10	14	9	6
1991	2	5	11	18	11	7
First use of alcohol, grade 5 or earlier						
1989	28	21	13	10	22	14
1991	29	19	12	7	21	12
Driving after drinking, once or more, past year						
1989	6	11	17	46	25	17
1991	7	10	15	40	22	14
Riding after drinking, once or more, past year						
1989	35	47	62	70	53	56
1991	36	48	58	62	48	54

[1]See figures 8, 9, and 11 for item content

Search Institute, 1991

• 1991 rates for driving after drinking and for riding in a car driven by someone who had been drinking have decreased in both grade 10 and grade 12.

•Although not shown in the figure, for comparative purposes we re-calculated the prior study's percentages on where students who drink **get** the alcohol they drink. The greatest differences occur in the "from friends, own age" response.

	Grade (%)			
From friends, own age	6	8	10	12
1989	11	42	61	69
1991	26	53	64	63

The above shows that percentages for 6th and 8th graders on this measure have increased significantly.

In addition, lesser percentages of 1991 6th and 8th graders report getting the alcohol they drink from their parents' alcohol at home (76% vs. 80%, 1989, and 59% vs. 62%, 1989. And 1991 10th graders are more likely than their 1989 counterparts to buy the alcohol they drink from a store (11% vs. 7%), and more likely to get it from someone of legal age (54% vs. 47%).

V. CIGARETTE AND SMOKELESS TOBACCO USE

Cigarette Use (Figures 13 and 14)

• On average, half of all students report cigarette use, once or more, lifetime.

• Rates on all measures rise as grade increases, with, for example, a range of 7 percent (6th graders) to 31 percent (12th graders) on "last 2 weeks" use.

• Figure 14 shows graphically the grade percentages for daily cigarette use, last 30 days. Note that 12 percent of seniors smoke one-half pack or more per day--a threefold increase from 8th grade.

• Across all grades, females are more likely than males to smoke cigarettes in the "last 30 days" and "last 2 weeks."

Smokeless Tobacco Use (Figure 13)

• Significantly higher percentages of males than females report smokeless tobacco use.

• The range for regular use of smokeless tobacco is less than 1 percent for 6th graders to 4 percent for 12th graders.

Grade When Tobacco Was First Used (Figure 15)

• About one-fifth (21%) of 6th graders report that they first used cigarettes in grade 5 or earlier, compared to 11 percent of 12th graders.

Figure 13: Tobacco Use

	Grade (%)				Gender(%)	
	6	8	10	12	M	F
Cigarette Use						
Lifetime, once or more	29	48	59	69	51	51
Last 12 months, once or more	15	31	42	49	33	34
Last 30 days, once or more	9	19	30	34	22	24
Last 2 weeks, once or more	7	14	26	31	18	20
Smokeless Tobacco						
Lifetime, once or more	9	14	25	32	32	7
Last 12 months, once or more	4	7	15	17	18	3
Last 30 days, once or more	1	3	8	10	10	1
Frequency of use						
Never	90	84	75	68	67	92
Once or twice	7	10	13	17	17	7
Occasionally, not regularly	2	4	7	8	9	1
Regularly in the past	1	1	3	3	3	*
Regularly now	*	1	2	4	3	*

* = Less than 1 percent
Based on survey items 20-23, 26-29

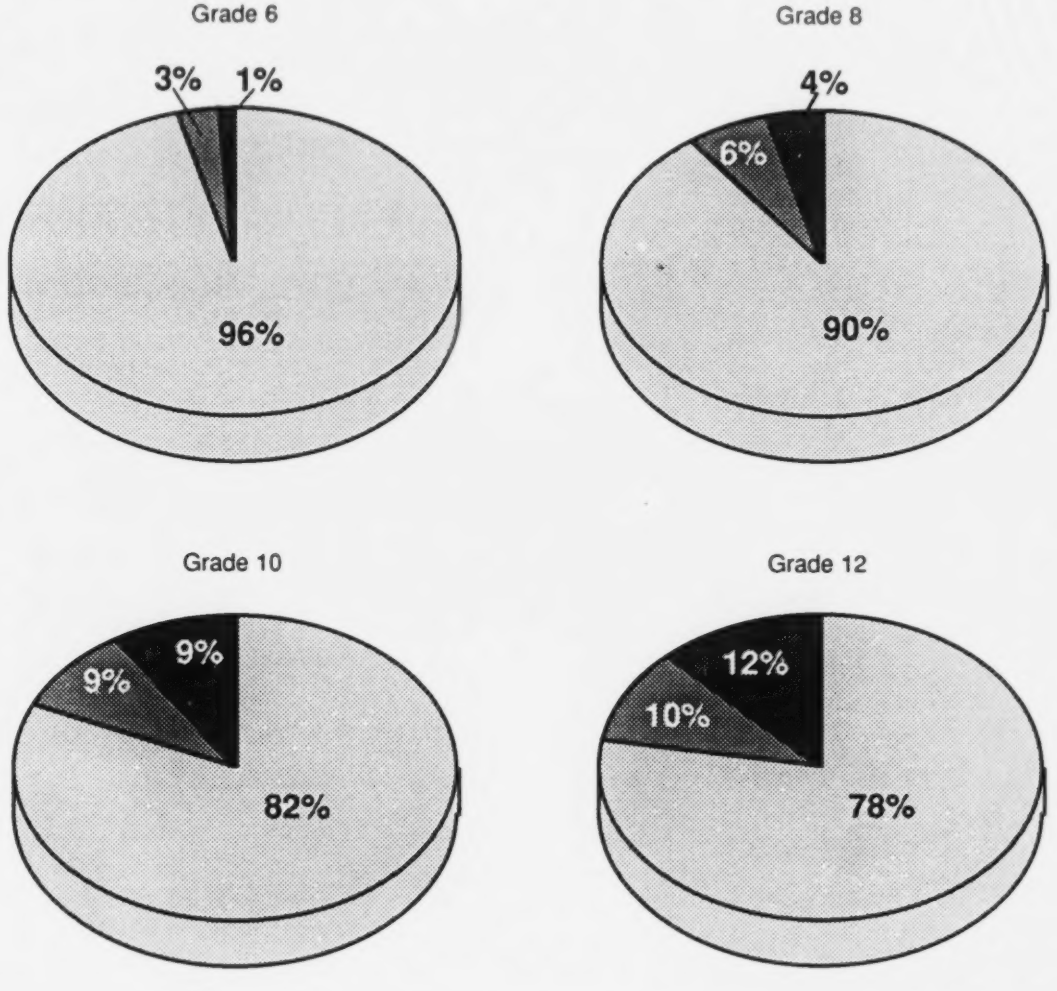
Search Institute, 1991

Figure 14: Cigarette Use Per Day
During the "last 30 days"

None or less than 1 cigarette per day

1-5 cigarettes per day

1/2 pack or more per day



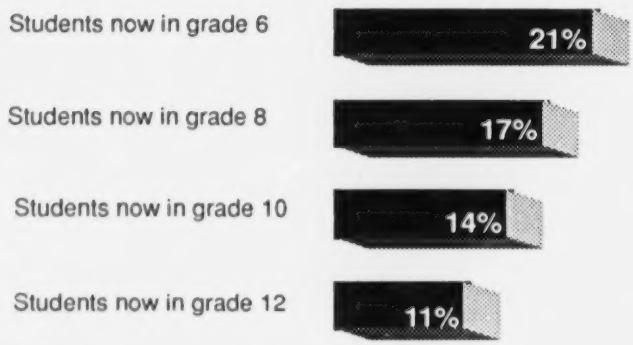
Based on survey item 25

Search Institute, 1991

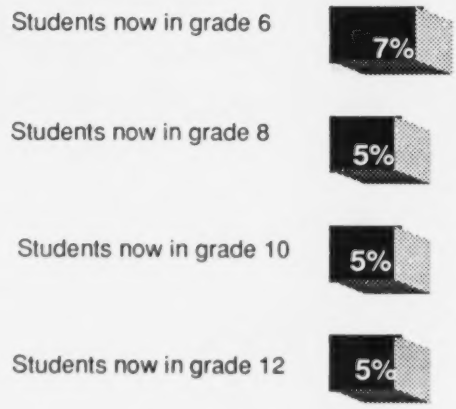
Figure 15: First Use of Tobacco

Percentage of all students in each grade reporting that . . .

They first tried smoking cigarettes in grade 5 or earlier



They first tried using smokeless tobacco in grade 5 or earlier



Based on the following survey items:
75. When (if ever) did you first try cigarettes?
76. When (if ever) did you first try smokeless tobacco?

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• Percentages for using smokeless tobacco in grade 5 or earlier vary only slightly by grade: grade 6 = 7 percent and grades 8, 10, 12 = 5 percent.

Comparisons of Tobacco Use, 1989 and 1991 (Figure 16)

• Sixth grade patterns of increased use of cigarettes occur on lifetime, annual (not shown), last 30 days, and last 2 weeks use. For grades 8, 10, and 12, use has stayed the same or decreased.

• Daily cigarette use over all grades has stayed the same.

• On the lifetime measure of smokeless tobacco, percentages have dropped-again, for all grades except 6th.

Figure 16: Comparisons of Tobacco Use, 1989 and 1991[1]

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Cigarette Use						
Lifetime						
1989	24	49	60	70	52	51
1991	29	48	59	69	51	51
Last 30 days						
1989	5	23	31	36	23	26
1991	9	19	30	34	22	24
Last 2 weeks						
1989	4	19	26	31	19	22
1991	7	14	26	31	18	20
1/2 pack or more per day						
1989	1	4	9	12	7	7
1991	1	4	9	12	7	6
Smokeless Tobacco Use						
Lifetime						
1989	7	18	30	36	38	8
1991	9	14	25	32	32	7
Last 30 days						
1989	1	5	8	8	11	1
1991	1	3	8	10	10	1

[1] See figures 13 - 15 for item content.

Search Institute, 1991

VI. MARIJUANA, COCAINE/CRACK AND AMPHETAMINE USE

Marijuana/Hashish Use and Availability (Figures 17 and 18)

• Lifetime marijuana or hashish use ranges from 3 percent in grade 6 to 34 percent in grade 12; the greatest change occurs between grades 8 and 10.

• On the "last 2 weeks" measure, 10 percent of seniors and 7 percent of sophomores report marijuana use once or more. Use "3 or more times" is reported by 5 percent of seniors and 4 percent of sophomores.

• Females are less likely than males to use marijuana, true for both "once or more" usage rates and high frequency usage rates.

• Across all grades 2 percent of students report that they first used marijuana in grade 5 or earlier.

• One in ten 6th graders has been offered marijuana in the past year, while 4 in 10 seniors report such an offer.

• Nearly 1 in 10 seniors (9%) say that someone has tried to give or sell them marijuana or hashish more than 20 times in the "last year"--or about twice a month. (Figure 18)

Cocaine/Crack Use and Availability (Figures 19 and 20)

• Students were asked both about cocaine use generally and crack use specifically. Rates for cocaine use, lifetime, range from 1 percent in grade 6 to 6 percent in grade 12. Rates for crack use, lifetime, range from 1 percent in grade 6 to 2 percent in grades 8, 10, and 12.

Figure 17: Marijuana Use

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Lifetime						
Once or more	3	12	25	34	20	17
10 or more times	*	3	10	17	8	6
Last 12 months						
Once or more	2	8	17	24	14	12
10 or more times	*	2	7	9	5	3
Last 30 days						
Once or more	1	5	10	14	8	6
3 or more times	*	2	6	8	5	3
Last 2 weeks						
Once or more	1	3	7	10	6	4
3 or more times	*	1	4	5	3	2
First use						
Grade 5 or earlier	2	2	2	2	3	1

* = Less than 1 percent
Based on survey items 30-33:
How many times, if any, have you used marijuana (grass, pot) or hashish (hash, hash oil. . .)?
and 71:
When, if ever, did you first try marijuana or hashish?

Search Institute, 1991

Figure 18: Availability of Marijuana

In the last year, how many times has anyone tried to give or sell you marijuana or hashish?	Grade (%)				Gender (%)	
	6	8	10	12	M	F
None	89	81	68	59	71	78
1-2 times	7	9	13	16	13	10
3-5 times	2	4	6	7	5	4
6-10 times	1	2	4	5	3	3
11-20 times	*	1	3	3	2	2
More than 20 times	1	3	7	9	6	4

* = Less than 1 percent
Based on survey item 79

Search Institute, 1991

Figure 19: Cocaine and Crack Use

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Lifetime, once or more						
Cocaine	1	2	5	6	4	3
Crack	1	2	2	2	2	1
Last 12 months, once or more						
Cocaine	1	1	3	3	2	1
Crack	*	1	1	1	1	1
Last 30 days, once or more						
Cocaine	*	1	1	1	1	1
Crack	*	*	1	1	1	*
Last 2 weeks, once or more						
Cocaine	*	*	1	1	1	*
Crack	*	*	1	*	*	*

* = Less than 1 percent
Based on the following items:
40. - 43. How many times, if any, have you used cocaine. . . ?
44. - 47. How many times, if any, have you used the form of cocaine known as crack. . . ?

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Figure 20: Availability of Cocaine

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
In the last year, how many times has anyone tried to give or sell you cocaine (coke, snow, rock, crack)?						
None	94	91	87	88	89	92
1 - 2 times	4	5	7	6	6	5
3 - 5 times	1	1	2	2	2	1
6 - 10 times	*	1	2	1	1	1
11 - 20 times	*	1	1	1	1	1
More than 20 times	1	1	2	1	1	1

* = Less than 1 percent
Based on survey item 80

Search Institute, 1991

• Only 1 percent or less of students at each grade level report use of either cocaine or crack in the "last 30 days" or "last 2 weeks."

• Overall, 9 out of 10 students say that no one has tried to give or sell them cocaine (coke, snow, rock, crack) in the "last year." (Figure 20)

Amphetamine Use (Figure 21)

• On the lifetime measure of amphetamine use, grade percentages range from 3 percent for 6th graders to 13 percent for 10th graders.

• Use, "last 30 days," is uncommon, with 10th graders highest at 4 percent.

• On all measures, amphetamine use is slightly higher for females than for males.

Comparisons of Marijuana, Cocaine/Crack, and Amphetamine Use, 1989 and 1991 (Figure 22)

• 1991 seniors are significantly less likely than their 1989 counterparts to report using marijuana at least once in their lifetime. Rates for use in 1991, "last 30 days" and "last 2 weeks," tend to be similar to those in 1989 at all grade levels.

• Lifetime cocaine use for seniors has decreased from 9 percent to 6 percent, with crack use across all grades staying about the same.

• Lifetime amphetamine use shows a slight increase at the 6th-grade level and a decrease at the 12th-grade level.

Figure 21: Amphetamine Use

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Lifetime						
Once or more	3	7	13	12	7	10
Last 12 months						
Once or more	2	5	8	6	4	6
Last 30 days						
Once or more	1	2	4	3	2	3

Based on survey items 67-69:

Amphetamines are sometimes called uppers, speed, bennies, dexies, pep pills, diet pills. They include the following drugs: Benzedrine, Dexedrine, Methedrine, Ritalin, Preludin, Dexamyl, Methamphetamine. DO NOT INCLUDE ANY NON-PRESCRIPTION OR OVER-THE-COUNTER PILLS INCLUDED IN YOUR ANSWER TO QUESTION 66.

How many times, if any, have you taken amphetamines without a doctor telling you to take them . . . ?

Search Institute, 1991

Figure 22: Comparisons of Marijuana, Cocaine, Amphetamine Use, 1989 and 1991[1]

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Marijuana Use						
Lifetime						
1989	3	12	28	42	24	21
1991	3	12	25	34	20	17
Last 30 days						
1989	0	5	12	16	9	8
1991	1	5	10	14	8	6
Last 2 weeks						
1989	0	3	9	11	7	5
1991	1	3	7	10	6	4
Cocaine/Crack Use						
Lifetime, cocaine						
1989	1	3	6	9	5	4
1991	1	2	5	6	4	3
Lifetime, crack						
1989	1	1	2	2	2	1
1991	1	2	2	2	2	1
Amphetamine Use						
Lifetime						
1989	1	6	12	16	8	10
1991	3	7	13	12	7	10

[1] See figures 17, 19, and 21 for item content.

VII. OTHER DRUG USE

In addition to marijuana, cocaine/crack, and amphetamines, the survey investigated use of seven other illicit drugs: LSD ("acid"), PCP or Angel Dust, heroin, other narcotics (methadone, opium, morphine, codeine, or Demerol), methaqualone (quaaludes, 'ludes, soapers), barbiturates (downers, goofballs, yellows, reds, blues, rainbows), and tranquilizers (Librium, Valium, Miltown). In general, students were instructed to report use if taken "on your own--without a doctor telling you to take them."

Figures 23 (lifetime use), 24 (last 12 months use), and 25 (last 30 days use) present the findings, which are summarized below.

• Of these seven illegal drugs, the highest lifetime use is for "other narcotics," reported by 9 percent of both 10th and 12th graders. Barbiturates and LSD are the next most commonly used drugs by students in these grades. (Figure 23)

• No more than 6 percent of students report annual use of these illicit drugs. Two percent or less report use in the past month. (Figures 24 and 25)

• Females show slightly higher rates than do males on both lifetime and annual use of "other narcotics." (Figures 23 and 24)

• Combining these 7 drugs with use rates for marijuana, cocaine, and amphetamines gives the following lifetime use rates, once or more, for 12th graders:

Figure 23: Other Illicit Drug Use, Lifetime

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Lifetime, once or more						
LSD ("acid")	1	3	7	7	5	4
PCP (or Angel Dust)	1	2	2	2	2	1
Heroin	*	2	2	1	2	1
Other narcotics (methadone, opium, morphine, codeine, Demerol)—without a doctor telling you to take them	2	6	9	9	6	8
Methaqualone (quaaludes, 'ludes, soapers)	*	2	3	4	3	2
Barbiturates (downers, goofballs, yellows, reds, blues, rainbows)—without a doctor telling you to take them	3	6	8	7	6	6
Tranquilizers (Librium, Valium, Miltown)	2	3	6	6	4	5

* = Less than 1 percent
Based on survey items 34, 35, 51, 54, 57, 60, 63

Search Institute, 1991

Figure 24: Other Illicit Drug Use, Annual

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Last 12 months, once or more						
LSD ("acid")	*	2	5	5	3	2
PCP (or Angel Dust)	*	1	1	1	1	*
Heroin	*	1	1	*	1	*
Other narcotics (methadone, opium, morphine, codeine, Demerol)—without a doctor telling you to take them	1	4	6	5	3	5
Methaqualone (quaaludes, 'ludes, soapers)	*	1	2	2	2	1
Barbiturates (downers, goofballs, yellows, reds, blues, rainbows)—without a doctor telling you to take them	2	4	4	4	3	4
Tranquilizers (Librium, Valium, Miltown)	1	2	3	3	2	3

* = Less than 1 percent
Based on survey items 35, 38, 52, 55, 58, 61, 64

Search Institute, 1991

Figure 25: Other Illicit Drug Use, Past Month

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Last 30 days, once or more						
LSD ("acid")	*	1	2	1	2	1
PCP (or Angel Dust)	*	*	1	*	*	*
Heroin	*	*	*	*	*	*
Other narcotics (methadone, opium, morphine, codeine, Demerol)—without a doctor telling you to take them	*	2	2	2	1	2
Methaqualone (quaaludes, 'ludes, soapers)	0	1	1	1	1	1
Barbiturates (downers, goofballs, yellows, reds, blues, rainbows)—without a doctor telling you to take them	1	2	2	2	1	2
Tranquilizers (Librium, Valium, Miltown)	1	1	1	1	1	1

* = Less than 1 percent
Based on survey items 36, 39, 53, 56, 59, 62, 65

Search Institute, 1991

Marijuana	34%
Amphetamines	12%
Other narcotics	9%
LSD	7%
Barbiturates	7%
Tranquilizers	6%
Cocaine	6%
Methaqualone	4%
PCP	2%
Heroin	1%

Illicit Drug Use Index (Figure 26)

The Illicit Drug Use Index was constructed to measure the percentage of students who have used, once or more without a doctor's prescription, one or more of these illicit drugs: marijuana, cocaine, amphetamines, LSD, PCP, heroin, other narcotics, methaqualone, barbiturates, or tranquilizers. In Figure 26, percentages are given for lifetime, last 12 months, and last 30 days on this index of use.

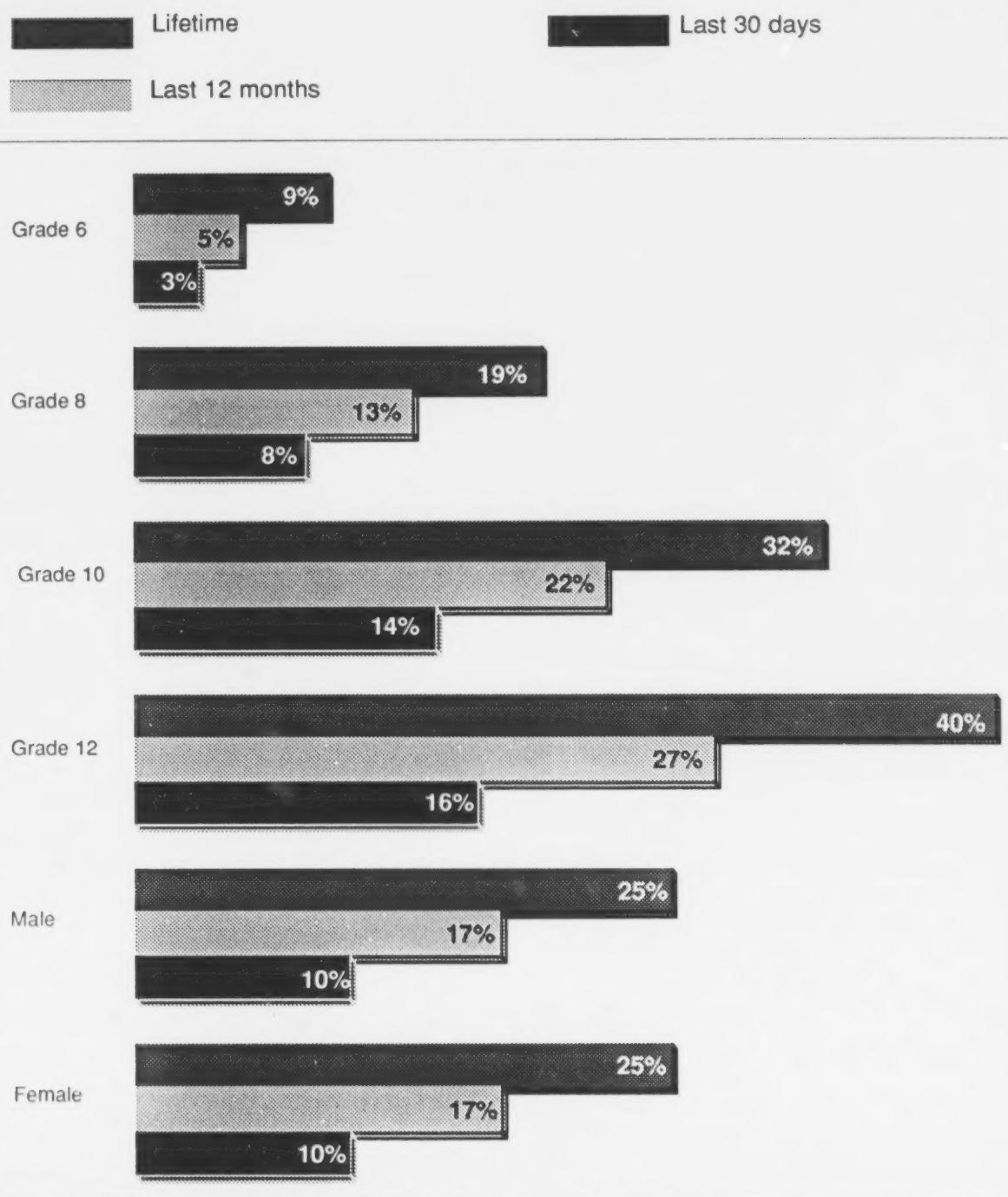
- Lifetime percentages on the Illicit Drug Use Index range from 9 percent for grade 6 to 40 percent for grade 12.

- The "last 30 days" percentage for students in grade 12 is 16 percent. The 10th-grade percentage is 14 percent, 8th-grade is 8 percent, and 6th-grade is 3 percent.

- The increase in illicit drug use is somewhat greater between the 8th and 10th grades than between either 6th and 8th or 10th and 12th grades.

- No gender differences occur on the Index.

Figure 26: Illicit Drug Use Index*



* Refers to percentage of students who have used, once or more, one of these drugs: marijuana, LSD, PCP, cocaine, crack, heroin, other narcotics, quaaludes, barbiturates, tranquilizers, or amphetamines.

Search Institute, 1991

Inhalant Use (Figure 27)

• Use of inhalants (sniffing glue or breathing contents of aerosol spray cans in order to get high) presents a pattern different from that seen on any of the substances previously discussed. Inhalant use does not increase with grade; rather, it peaks in 8th or 10th grade and then declines.

• Lifetime use increases from 12 percent in grade 6 to 19 percent in grade 10, then drops to 14 percent in grade 12. On the annual and past month measures, percentages are highest in grade 8 (11% and 5% respectively).

• Higher percentages of students in grades 6 and 8 than in grades 10 and 12 report first use in grade 5 or earlier.

Use of Over-the-Counter Diet and Stay-Awake Pills (Figure 28)

In the survey, students were given the following instructions: "Some types of diet pills (also called appetite suppressants) can be sold legally without a doctor's prescription by drugstores, through the mail, etc. These include Dexatrim, Dietac, Prolamine, and others. Some stay-awake pills can be sold legally without a doctor's prescription by drugstores, through the mail, etc. These include No-Doz, Vivarin, Wake, and others. Have you ever taken any of these legal, over-the-counter diet pills or stay-awake pills?"

• Gender differences are apparent on use of over-the-counter diet and stay-awake pills, with females reporting greater use than males.

Figure 27: Inhalant Use

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Lifetime						
Once or more	12	18	19	14	16	15
Last 12 months						
Once or more	6	11	9	5	8	6
Last 30 days						
Once or more	3	5	4	2	4	3
First use						
Grade 5 or earlier	7	7	4	3	6	5

Based on survey items 48-50:
How many times, if any, have you sniffed glue or breathed the contents of aerosol cans in order to get high?
and 77:
When (if ever) did you first try to get high by sniffing or inhaling glue, the contents of aerosol spray cans, or other gases or sprays?

Search Institute, 1991

Figure 28: Use of Over-the-Counter Diet and Stay-Awake Pills

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Use of legally sold diet and stay-awake pills						
Never	90	78	63	56	77	67
Once or twice	6	11	19	23	13	17
Occasionally, not regular	3	8	12	15	8	11
Regularly in past	1	2	4	4	2	4
Regularly now	*	1	1	1	*	1

* = Less than 1 percent

Based on survey item 66:

Some types of diet pills (also called appetite suppressants) can be sold legally without a doctor's prescription by drugstores, through the mail, etc. These include Dexatrim, Dietac, Prolamine, and others. Some stay-awake pills can be sold legally without a doctor's prescription by drugstores, through the mail, etc. These include No-Doz, Vivarin, Wake, and others.

Have you ever taken any of these legal, over-the-counter diet pills or stay-awake pills?

• Current, regular use is minimal; however, 15 percent of 12th graders, 12 percent of 10th graders, 8 percent of 8th graders, and 3 percent of 6th graders report they occasionally use these pills.

Comparisons of Other Drug Use, 1989 and 1991 (Figure 29)

• For the most part, lifetime use of the drugs listed in this comparison is similar for students in 1989 and 1991. Exceptions are the decrease for seniors on use of "other narcotics" and tranquilizers.

• Rates on the Illicit Drug Use Index have increased significantly (6% to 9%) for students in grade 6 and decreased significantly for students in grade 12 (47% to 40%).

• The percentage of 1991 6th graders who report inhalant use is significantly higher than the percentage for 1989 6th graders. Percentages have also increased for 8th graders and females.

Figure 29: Comparisons of Other Drug Use, 1989 and 1991[1]

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Lifetime, once or more						
LSD						
1989	1	2	6	8	5	4
1991	1	3	7	7	5	4
PCP						
1989	1	2	3	3	2	2
1991	1	2	2	2	2	1
Heroin						
1989	*	2	2	2	2	1
1991	*	2	2	1	2	1
Other Narcotics						
1989	1	5	9	11	6	7
1991	2	6	9	9	6	8
Methaqualone						
1989	1	2	4	5	3	3
1991	*	2	3	4	3	2
Barbiturates						
1989	2	5	9	7	6	6
1991	3	6	8	7	6	6
Tranquilizers						
1989	1	4	6	8	4	6
1991	2	3	6	6	4	5
Illicit Drug Use Index						
1989	6	18	34	47	28	26
1991	9	19	32	40	25	25
Inhalant use						
1989	7	16	18	15	16	12
1991	12	18	19	14	16	15

[1] See figures 23, 26, and 27 for item content.
* = Less than 1 percent

Search Institute, 1991

VIII. CATEGORIES OF PROBLEM USE

Students were categorized by their alcohol and drug use patterns into one of 4 groups: problem drinker, problem drug user, problem drinker **and** problem drug user, and neither problem drinker nor problem drug user. **These categories are based on the quantity of alcohol and/or other drugs used, not the consequences of such use.**

Creating the criteria for these categories requires making judgments about what constitutes problem use. While there is no national consensus on what divides responsible use from problem use, these 4 categories represent one reasonable way to summarize use patterns. The 4 categories are defined as follows:

1. **Problem drinker**: Reported use of alcohol 6 or more times in the "last 30 days," and/or reported consumption of 5 or more drinks in a row in the "last 2 weeks" once or more, and no use of an illicit drug 6 or more times in the "last 12 months."

2. **Problem drug user**: Reported use of an illicit drug (e.g., marijuana, cocaine, amphetamines, heroin) 6 or more times in the "last year," and use of alcohol 5 times or less in the "last 30 days," and no report of consuming 5 or more drinks in a row in the "last 2 weeks."

3. **Problem drinker and problem drug user**: Reported use of alcohol 6 or more times in the "last 30 days," and/or consumption of 5 or more drinks in a row, once or more, in the "last 2 weeks," combined with the use of an illicit drug 6 or more times in the "last 12 months."

4. **Neither problem drinker nor problem drug user.** A student is placed in this category if ne or she does not fall into categories 1, 2, or 3.

Each student is placed in one and only one category. Figure 30 shows the distribution of the four categories for each grade.

• One in 10 6th graders is categorized as a problem drinker.

• Percentages of students in the "problem drinker" category rise from 10 percent in grade 6 to 13 percent in grade 8, 21 percent in grade 10, and 28 percent in grade 12.

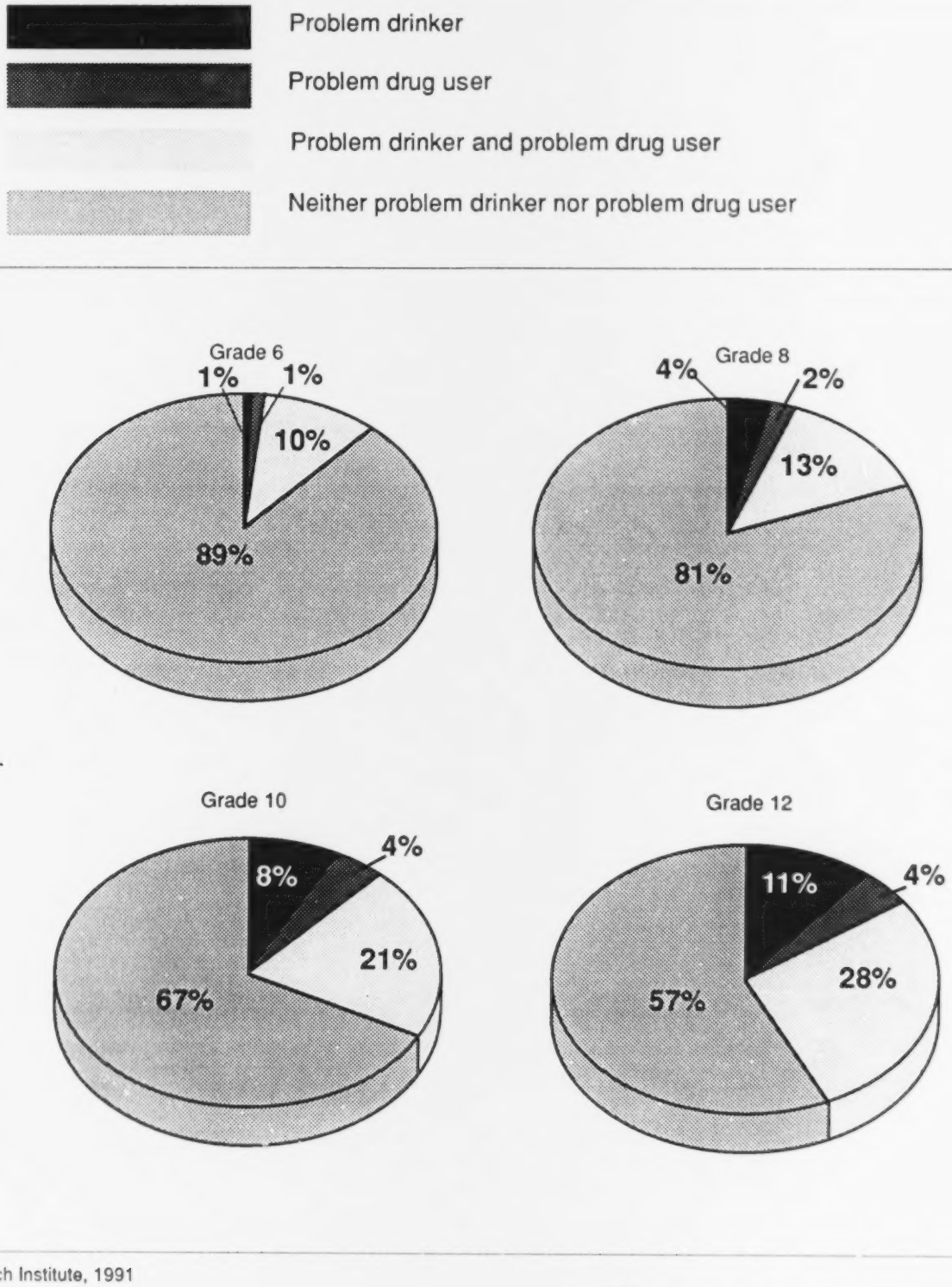
• The percentage of "problem drinker and problem drug-user" increases from 1 percent of students in grade 6 to 11 percent in grade 12.

• In grade 6, 9 out of 10 students are in none of the problem categories; by grade 12, only about 6 of 10 students are not in problem categories.

Comparisons of Problem Use Patterns, 1989 and 1991 (Figure 31)

• The levels of problem use tend to be similar across the 1989 and 1991 studies. The greatest variance occurs in the percentages of seniors categorized as "problem drinker and problem drug user": 14 percent (1989) dropping to 11 percent (1991).

Figure 30: Patterns of Problem Alcohol and Other Drug Use



Search Institute, 1991

Figure 31: Comparisons of Problem Use Patterns, 1989 and 1991[1]

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
A. Problem drinker						
1989	8	14	21	26	20	16
1991	10	13	21	28	21	16
B. Problem drug user						
1989	1	1	3	4	2	3
1991	1	2	4	4	2	3
C. Problem drinker and problem drug user						
1989	0	4	9	14	8	6
1991	1	4	8	11	6	6
D. Neither problem drinker nor problem drug user						
1989	91	81	67	56	70	75
1991	89	81	67	57	71	76
Problem alcohol and/or drug users (sum of A, B, and C)						
1989	**9**	**19**	**33**	**44**	**30**	**25**
1991	**11**	**19**	**33**	**43**	**29**	**24**

[1] See text preceding figure 30 for definitions.

Search Institute, 1991

IX. PERCENTAGE OF STUDENTS AT RISK

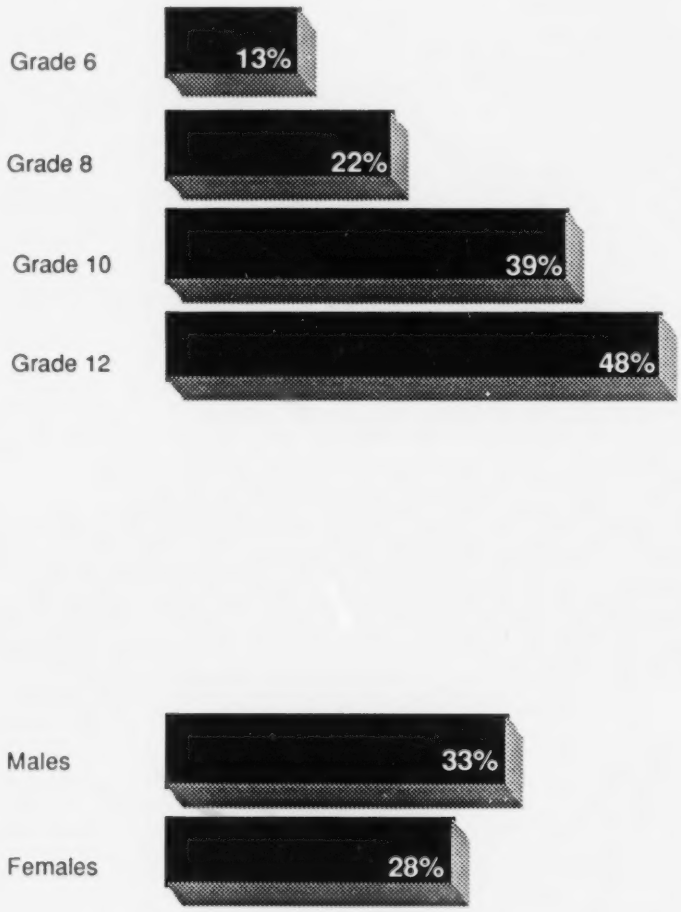
The definition of "at risk" developed for the 1988-89 Wisconsin statewide study is used again in this study. It describes a student who has initiated one or more forms of drug use at levels that could either signal an emerging or eventual dependency or risk physiological damage. The at-risk percentages are larger than the percentage of problem users discussed in the previous section due to the addition of regular use of cigarettes, smokeless tobacco, and inhalants. A student is classified as at risk if 1 or more of these criteria is met:

1. Used alcohol 40 or more times in the last 12 months
2. Used alcohol 6 or more times in the last 30 days
3. Drank 5 or more drinks in a row, once or more, last 2 weeks
4. Used cigarettes daily during the last 30 days
5. Regularly used smokeless tobacco
6. Used an illicit drug 6 or more times in the last 12 months (marijuana, cocaine, amphetamines, heroin, other narcotics, LSD, PCP, barbiturates, methaqualone, tranquilizers)
7. Used an illicit drug 3 or more times in the last 30 days
8. "Sniffed glue or breathed the contents of aerosol spray cans in order to get high," 20 or more times in the last 12 months.

Figure 32 gives the percentages of students who are categorized as at risk.

- The percentages of students at risk range from 13 percent in 6th grade to 48 percent in 12th grade.

Figure 32: At-risk Index*



* Refers to the percentage of students who have one or more of these characteristics: used alcohol 40 + times in last year, used alcohol 6 or more times in last month, drank 5 or more drinks in a row once or more during the last 2 weeks, smoked 1 or more cigarettes a day in the last month, used smokeless tobacco regularly, used an illicit drug 6 or more times in the last year, sniffed glue 20 or more times in the last year, or used an illicit drug 3 or more times in the last month.

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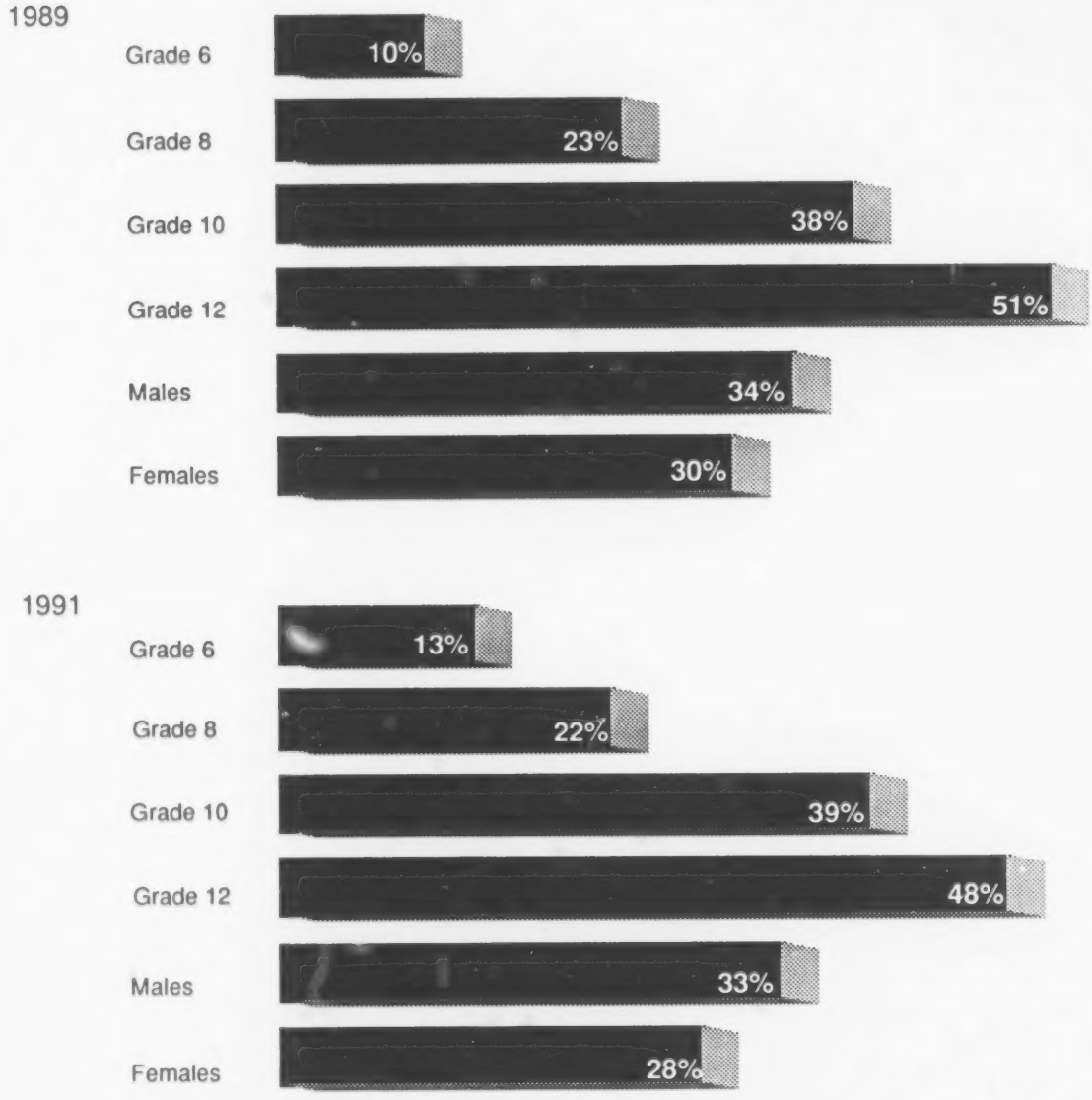
• Significant gender differences occur on this At-risk Index, with males more likely to be at risk than females.

Comparisons of At-risk Index, 1989 and 1991 (Figure 33)

• Percentages on the At-Risk Index are higher for 1991 6th graders (13% vs. 10%), whereas percentages for 1991 12th graders have decreased (51% to 48%).

Figure 33: Comparisons of At-risk Index, 1989 and 1991[1]



[1] See text preceding figure 32 for definitions of index.

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X. COMPARISONS TO NATIONAL NORMS

12th Grade Comparisons

Each spring for the past 17, the University of Michigan, under contract to the National Institute on Drug Abuse, conducts a study of high school seniors called *Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth*. This project provides national estimates of adolescent alcohol and other drug use. To gather this information, a representative sample of more than 16,000 high school seniors in public and private schools across the country is surveyed. Major findings are released annually at a news conference, with full results published at a later date.

The news release on 1990 data begins, "Illicit drug use by young Americans in high school and college continued to decline for another year." And, "There is slow but steady progress in our long-term efforts, but we must not lose sight of the the fact that even today a significant fraction of our young people are involved with these drugs, and that there still remains much to be done."

Figure 34 compares Wisconsin seniors to seniors in the national *Monitoring the Future* project for 1990. This comparison is possible because many of the alcohol and other drug use measures in the Wisconsin study are based on the University of Michigan survey. Key findings are presented below.

- On all measures of alcohol use, Wisconsin seniors are **higher** than seniors nationally. Note, particularly, the 37 percent vs. 32 percent rate on the intoxication or binge drinking measure.

Figure 34: Comparisons to National Norms for High School Seniors

	National 12th graders 1990 (%)	Wisconsin 12th graders 1991 (%)
Used alcohol, once or more, lifetime	90	94
once or more, last 12 months	81	84
once or more, last 30 days	57	61
Drank 5 or more drinks in a row, during last 2 weeks, once or more	32	37
Smoked 1/2 pack of cigarettes or more per day, last 30 days	11	12
Used marijuana, once or more, lifetime	41	34
once or more, last 12 months	27	24
once or more, last 30 days	14	14
Used cocaine, once or more, lifetime	9	6
once or more, last 12 months	5	3
once or more, last 30 days	2	1
Used amphetamines, once or more, lifetime	18	12
once or more, last 12 months	9	6
once or more, last 30 days	4	3
Used tranquilizers, once or more, lifetime	7	6
once or more, last 12 months	4	3
once or more, last 30 days	1	1
Used illicit drug, once or more, lifetime	48	40
once or more, last 12 months	32	27
once or more, last 30 days	17	16

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• Rates for cigarette use in Wisconsin are similar to the national norms. Again, from *Monitoring the Future,* "I think the conventional wisdom, derived from the overall smoking declines in the general population, is that smoking is down among our youngsters. Unfortunately, conventional wisdom couldn't be more wrong. There has been practically no change in their smoking rates throughout the 1980s. These smoking practices are going to lead to the preventable deaths of hundreds of thousands of these young people-a reprehensible and embarrassing fact with which this society has not come to grips."

• Compared to the national sample of seniors, illicit drug use for Wisconsin seniors is **lower** on both "lifetime" and "last 12 months" use for all drugs listed. On "last 30 days" use, Wisconsin seniors' percentages are similar to the national figures. Note, particularly, that 40 percent of Wisconsin seniors vs. 48 percent of national seniors report illicit drug use, once or more in their lifetime.

• Figure 35 shows that, whereas national alcohol use rates have decreased over the approximately two-year span, Wisconsin rates have tended to stay the same.

6th, 8th, and 10th Grade Comparisons to National Data

A recent report released by Search Institute describes healthy and at-risk behavior among 47,000 6th-12th grade students. (See chapter 15 for further information on this study, called *The Troubled Journey: A Portrait of 6th-12th Grade Youth.*) The 111 school districts represented in the study tend to be from small communities (≤10,000) located in the Midwest, providing a salient reference point for Wisconsin students. The survey used to gather the data ("Search Institute Profiles of Student Life: Attitudes and

Figure 35: Changes in Alcohol Use, Seniors in Wisconsin and Seniors Nationally

	National 12th graders		Wisconsin 12th graders	
	1988 (%)	1990 (%)	1988-89 (%)	1991 (%)
Used alcohol, once or more, lifetime	92	90	94	94
once or more, last 12 months	85	81	86	84
once or more, last 30 days	64	57	62	61
Drank 5 or more drinks in a row, once or more, last 2 weeks	35	32	37	37

Search Institute, 1991

Behaviors") included a number of drug use items, thereby permitting a comparison to 1991 Wisconsin data for 6th, 8th, and 10th graders. Figure 36 shows these comparisons.

• Wisconsin 6th graders report greater lifetime use of alcohol, once or more (55%) than national 6th graders (44%). They are also higher in alcohol use in the "last 30 days" (14% vs. 10%). By 10th grade, the differences are smaller.

• Wisconsin 10th graders report greater cigarette use in the "last 30 days" than national 10th graders (30% vs. 25%).

Figure 36: Comparisons of Wisconsin and National* Data on Alcohol Use, Grade 6, 8, and 10

	Grade (%)		
	6	8	10
Used alcohol, once or more, lifetime			
Wisconsin	55	75	87
National	44	73	88
Used alcohol, once or more, last 12 months			
Wisconsin	31	55	74
National	22	51	73
Used alcohol, once or more, last 30 days			
Wisconsin	14	30	49
National	10	28	46
Drank 5 or more drinks in a row, once or more, last 2 weeks			
Wisconsin	11	16	27
National	9	16	27
Used cigarettes, once or more, last 30 days			
Wisconsin	9	19	30
National	10	18	25
Used marijuana, once or more, last 30 days			
Wisconsin	3	12	25
National	5	11	25

*Data are from Benson, P. L. (1990). The troubled journey: A portrait of 6th - 12th grade youth. Minneapolis: Lutheran Brotherhood.

Search Institute, 1991

XI. SUMMARY OF CHANGES ON SELECTED MEASURES OF ALCOHOL AND OTHER DRUG USE, 1989 AND 1991

This chapter summarizes trends in Wisconsin from 1989 to 1991. In Figure 37, frequencies for 9 measures of alcohol and other drug use are presented for 1989 and 1991. Changes that are statistically significant are noted with an asterisk (*).

There are 11 significant changes between 1989 and 1991. Nine of these changes are in the "right" direction, that is, use rates have declined from 1989 to 1991. In 2 cases, use has increased. Both of these increases occur among 6th grade students. Changes by grade are summarized below.

12th Grade

• Use has **decreased** significantly on 5 of the 9 measures: driving after drinking, lifetime use of smokeless tobacco, lifetime marijuana use, lifetime cocaine use, and lifetime use of any illicit drug (see Figure 26 for a definition of this illicit drug use index).

• Use has not changed on any of the measures of alcohol use or cigarette use.

10th Grade

• Use has **decreased** significantly on 2 of the 9 measures: lifetime use of alcohol and smokeless tobacco.

8th Grade

• Use has **decreased** significantly on 2 measures: cigarette use in the "last 2 weeks" and smokeless tobacco use.

6th Grade

• Use has **increased** significantly on 2 measures: cigarette use in the "last 2 weeks" and lifetime use of any illicit drug. When we adopt a less conservative standard for claiming statistical significance (from $p \geq .01$ to $p \geq .05$), there is also a slight increase between 1989 and 1991 in binge drinking (5 or more drinks in a row).

Summary

There is evidence supporting the conclusion that progress has been made in preventing use among 8th, 10th, and 12th grade students between 1989 and 1991. (This is particularly true for smokeless tobacco, with decreases for grades 8, 10, and 12). The most systematic change has occurred among 12th graders, with decreases seen on 5 of 9 measures.

However, the percentages in Figure 37 raise several areas of concern. It is recommended that each of the areas listed below receive significant attention in future Wisconsin prevention efforts:

• While some success in prevention has occurred among 8th, 10th, and 12th grade students, no positive changes are seen among 6th grade students. On two measures, 6th grade students increased use significantly from 1989 to 1991.

• Cigarette use has decreased only among 8th grade students.

• Illicit drug use has decreased only among 12th grade students.

• Binge drinking (5 or more drinks in a row) has not decreased significantly in any of the grades.

• Alcohol use rates, in spite of progress in preventing use among 10th grade students, tend to have remained impervious to change. Because alcohol is the "drug of choice" among Wisconsin youth, additional prevention efforts are needed in this area.

Figure 37: Summary of Changes on Selected Measures, 1989 and 1991

Alcohol or Other Drug Use Measures	Grade (%) 6	8	10	12
Alcohol use, once or more, lifetime				
1989	53	78	91	94
1991	55	75	87*	94
Alcohol use, once or more, last 30 days				
1989	11	31	52	62
1991	14	30	49	61
Alcohol use, 5 or more drinks in a row, once or more last 2 weeks,				
1989	8	16	28	37
1991	11	16	27	37
Driving after drinking, once or more, past year				
1989	6	11	17	46
1991	7	10	15	40*
Cigarette use, once or more, last 2 weeks				
1989	4	19	26	31
1991	7*	14*	26	31
Smokeless tobacco, once or more, lifetime				
1989	7	18	30	36
1991	9	14*	25*	32*
Marijuana use, once or more, lifetime				
1989	3	12	28	42
1991	3	12	25	34*
Cocaine use, once or more, lifetime				
1989	1	3	6	9
1991	1	2	5	6*
Use of an illicit drug, once or more, lifetime				
1989	6	18	34	47
1991	9*	19	32	40*

* The difference between percentages for 1989 and 1991 is statistically significant (t-test, $p > .01$).

Search Institute, 1991

XII. COMMUNITY SIZE DIFFERENCES

Students from each of the grades in the study were combined and placed in the five community size categories listed below.

Community Size	Sample Size	Percent (%) Total Sample
Under 2,500	1937	33
2,500-9,999	711	12
10,000-49,000	1054	18
50,000-250,000 (city & suburbs)	1161	20
Over 250,000 (city & suburbs)	927	16

Figure 38 presents selected findings from this analysis. They are summarized below.

• 15 percent of students living in a city/suburb of over 250,000 people report never having had a course teaching about alcohol and other drugs; this percentage is the highest among the five groups.

• Overall, student alcohol use rates are lowest in cities/suburbs of 50,000-250,000 and highest in communities of under 2,500.

• Rates for cigarette use among the 5 groups are similar.

• Student marijuana use rates (once or more, lifetime) rise from 13 percent in communities of 2,500-9,999 to 26 percent in cities/suburbs over 250,000.

• Nearly one-third of students in cities/suburbs of over 250,000 have used an illicit drug once or more, lifetime.

• Percentages of students categorized as at risk range from 26 percent in cities/suburbs of 50,000-250,000 to 33 percent in communities of 10,000 to 49,999.

Figure 38: Community Size Differences*

	Under 2500 (%)	2500-9999 (%)	10,000-49,999 (%)	50,000-250,000 (city & suburbs) (%)	Over 250,000 (city & suburbs) (%)
Drug Education					
Never had a course teaching about alcohol or other drugs	12	10	10	12	15
Alcohol Use					
Once or more, lifetime	80	72	79	74	79
Once or more, last 12 months	65	56	63	56	58
Once or more, last 30 days	43	36	41	31	35
Once or more, last 2 weeks	32	27	30	24	27
Five Drinks in a Row (Binge Rate)					
Once or more, last 2 weeks	25	21	24	19	23
Tobacco Use					
Smoke 1/2 pack or more per day	6	5	7	6	7
Use smokeless tobacco regularly	2	2	2	1	1
Drug Use, once or more, lifetime					
Marijuana	15	13	20	20	26
Cocaine	3	3	3	4	6
Crack	1	2	1	2	2
Amphetamines	8	8	10	9	6
LSD	3	3	5	6	6
Other Narcotics	6	6	7	8	7
Drug Use, once or more, last 12 months					
Marijuana	10	9	13	15	17
Cocaine	2	1	1	2	3
Crack	1	1	1	1	1
Amphetamines	5	5	6	5	4
LSD	2	2	3	4	4
Other Narcotics	4	4	4	4	4
Illicit Drug Use Index					
Used an illicit drug, once or more, lifetime	21	22	26	26	32
Used an illicit drug, once or more, last 12 months	14	15	18	18	21
Students At Risk	32	27	33	26	32

*For total sample, combining 6th, 8th. 10th, and 12th grades

Search Institute, 1991

XIII. SCHOOL AND COMMUNITY RESOURCES

In the survey, students were asked, "What help does your community or school provide for young people who have problems or questions related to alcohol or other drug use?" Since not all of the 10 resources listed are available in every community, students may have been unsure as to how to respond to the 10, thereby muddying the data picture a bit. Nevertheless, indications of problem areas are present, as shown in Figure 39.

Knowledge of Resources (Figure 39)

• The 2 most commonly known resources are "school counselors or other staff trained to provide individual counseling" and "instruction about alcohol and other drugs in classes such as health." However, for the 2nd, the range is fairly wide, with only two-thirds of students in grade 6 who say they know such instruction is available.

• As grade increases, knowledge of the availability of such help tends to increase also. This finding suggests that more might be done in the younger grades to apprise students of resources such as local or national hotlines, programs, and support groups.

• Other current research confirms the importance of staffing programs with professionals who interact with high-risk youth in ways that communicate caring, encouragement, and understanding while helping them curtail their alcohol and other drug use.

Figure 39: Student Knowledge of Community and School Resources

Percentage of students who reported that they know such help is available

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Telephone "hotline"	32	45	44	47	42	42
Groups such as Alcoholics Anonymous, Alanon, Alateen	44	63	71	75	60	66
Programs for youth with alcohol or other drug problems sponsored by religious groups	33	40	46	46	42	40
School counselors or other staff trained to provide individual counseling	72	79	82	83	76	81
Instruction about alcohol and other drugs in classes such as health	67	72	84	85	75	79
School staff available to meet with students and discuss questions/concerns about alcohol and other drugs	44	48	51	54	50	49
Support group at school for students with alcohol or other drug problems	32	42	50	54	43	46
Support group at school for students recovering from alcohol or other drug use problems	24	29	32	37	31	31
Support group at school for students worried about the alcohol/drug use of people they care about	34	41	42	45	39	42
Student group such as Students Against Driving Drunk (SADD)	33	41	63	60	48	50

Based on survey item 109

Search Institute, 1991

Student Use of Resources (Figure 40)

Students were also asked which, if any, of the 10 resources they had used to help with an alcohol or other drug-related problem, and which resource they had needed but hadn't "asked for help." Figure 40 gives the percentages on each.

• For the most part, percentages of students who say they "have used this" are fairly small, never more than 16 percent.

• Students in grade 6 (and to a lesser extent grade 12) are the most apt to say they "have needed this but haven't asked for help."

• Greater percentages of males than females report they "have needed this but haven't asked for help."

Comparisons of Resources, 1989 and 1991 (Figure 41)

• In general, student knowledge of resources is greater or the same (in two 6th grade instances), for 1991 vs. 1989 students.

• This overall increase in knowledge of the availability of community and school resources, occurring over only a 2-year period, is a positive finding that would seem to reflect concerted efforts to raise student awareness in these areas.

Figure 40: Student Use of Resources

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Telephone "hotline"						
Have used	5	4	3	2	4	3
Have needed but haven't used	12	9	7	6	10	7
Groups such as Alcoholics Anonymous, Alanon, Alateen						
Have used	6	6	6	4	5	6
Have needed but haven't used	11	8	7	6	10	6
Programs for youth with alcohol or other drug problems sponsored by religious groups						
Have used	7	5	3	2	5	4
Have needed but haven't used	11	9	6	6	10	6
School counselors or other staff trained to provide individual counseling						
Have used	11	7	6	7	7	8
Have needed but haven't used	11	8	6	6	10	6
Instruction about alcohol and other drugs in classes such as health						
Have used	15	14	15	16	12	18
Have needed but haven't used	11	8	6	5	10	5
School staff available to meet with students and discuss questions/concern about alcohol and other drugs						
Have used	8	5	4	4	5	6
Have needed but haven't used	11	8	7	6	10	6
Support group at school for students with alcohol or other drug problems						
Have used	6	4	4	4	5	4
Have needed but haven't used	12	9	7	6	10	6
Support group at school for students recovering from alcohol or other drug use problems						
Have used	5	4	3	3	4	3
Have needed but haven't used	12	9	6	5	10	6
Support group at school for students worried about the alcohol/drug use of people they care about						
Have used	8	6	5	6	5	7
Have needed but haven't used	12	9	7	6	10	7
Student group such as Students Against Driving Drunk (SADD)						
Have used	6	5	8	6	5	8
Have needed but haven't used	12	9	6	6	10	6

Based on survey item 110

Search Institute, 1991

Figure 41: Comparisons of Resources, 1989 and 1991

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Knowledge that this help is available . . .						
School counselors or other staff trained to provide individual counseling						
1989	66	73	80	81	71	79
1991	72	79	82	83	76	81
Instruction about alcohol and other drugs in classes such as health						
1989	54	66	80	83	69	74
1991	67	72	84	85	75	79
School staff available to meet with students regarding alcohol and other drug concerns						
1989	44	43	45	49	45	46
1991	44	48	51	54	50	49
Programs for youth with alcohol or other drug problems sponsored by religious groups						
1989	33	37	39	44	39	37
1991	33	40	46	46	42	40

Search Institute, 1991

XIV. OPPORTUNITIES

In assessing the information in these chapters thus far, not only do we find certain areas of concern to highlight but also certain positive findings to celebrate.

Concerns

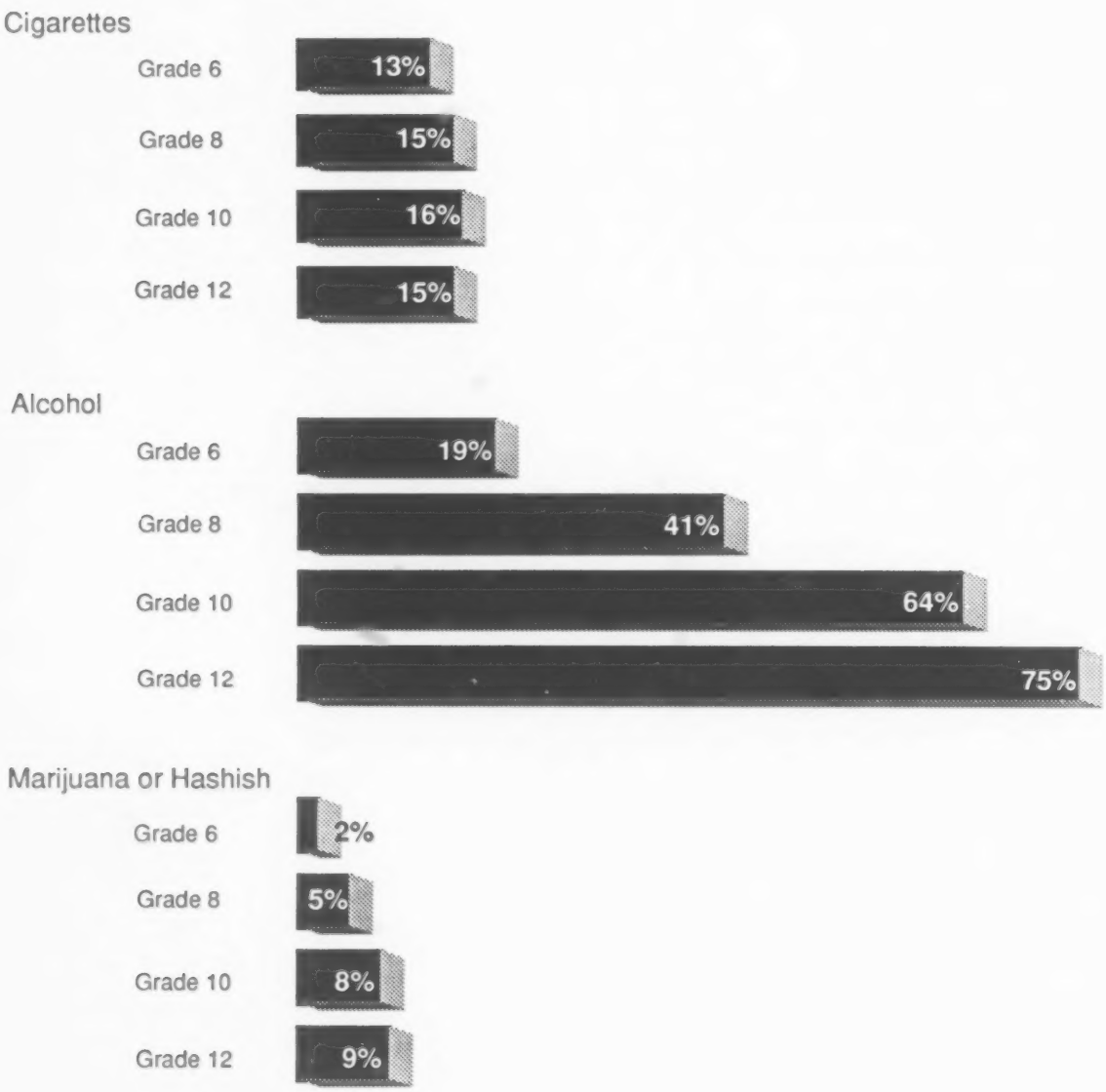
There are consistent indicators that give urgency to prevention strategies for 6th graders. Note, again:

- 29 percent of 6th graders report that they first drank more than just a sip of alcohol in grade 5 or earlier
- alcohol use on nearly all measures tends to be higher for 6th graders in 1991 than in 1989 (the only one of the grade levels to show such increases)
- cigarette use is higher for 6th graders in 1991, as is inhalant use
- the Illicit Drug Use Index percentages show a significant increase for 6th graders in 1991
- 10 percent of 6th graders are categorized as problem drinkers
- greater percentages of 1991 6th graders are categorized as at risk

Figure 42 contains projections of alcohol and other drug use in 5 years which underscore the concern regarding 6th graders. Whereas in the 1988-89 Wisconsin statewide study, 7 percent of 6th graders said they probably or definitely would use cigarettes, 13 percent of 1991 6th graders so report. Projections of alcohol use also increase: 16 percent of 1988-89 6th graders said they would probably or definitely use alcohol vs. 19 percent of 1991 6th graders (Figure 46).

Figure 42: Projections of Use in Five Years

Probably or **definitely** will use



Based on survey items 102-104

Search Institute, 1991

These findings suggest that, if no strategies are in place for students in the younger grades, they need to be formulated and implemented; if they are in place, they need to be evaluated.

In the context of school, a second and third concern arise. For grades 6, 10, and 12, percentages of students who report that they like school "quite a lot" or "very much" decrease significantly from 1989 to 1991.

Also noteworthy are the decreases for 10th and 12th graders in the percentages who report they do six or more hours of homework in an average week. Whereas the rate for 1989 10th graders is 36 percent, the rate for 1991 10th graders is 26 percent. Similarly, the rate for 1989 12th graders is 39 percent vs. 28 percent for 1991.

Both measures-liking for school and homework-are correlated negatively in this study with at-risk behavior, that is, the more they increase the less likely at-risk behavior occurs. They have, therefore, a strong role in reducing such behavior, as we will discuss in chapter 15.

On the binge drinking measure (5 or more drinks in a row, last 2 weeks), seniors' percentages are another cause for concern. Compared to the 1990 national norm of 32 percent on this measure, the rate for 1991 Wisconsin seniors is 37 percent. In addition, 18 percent of seniors report binge drinking **3 or more times**, last 2 weeks.

Indicators of Positive Change

But there is good news. Comparing these 1991 data to the findings from the 1988-89 study and to national data for seniors, we can see some evidence of positive change. Because none of these studies is longitudinal in nature, that

is, tracking the same students over a period of time, we cannot fully explore either changes or causes of change. Nevertheless, certain findings and further analysis give signs that positive change is occurring.

Note, for example, that although nearly one-fourth of students say their parents have never tried to talk with them about drugs and alcohol, students are **increasingly** likely to feel comfortable talking with their parent(s) about alcohol and other drug concerns. (See chapter 15 for more information about the role of parents in positive youth development.)

Greater percentages of students are reporting that they have had a course that spent "a lot of time" on alcohol and other drugs and how they affect people. Although information alone is ineffective in preventing alcohol and other drug misuse, when it is age-appropriate, of quality, and taught by teachers who can illicit trust, it is an important component of prevention programs.

On measures of lifetime, annual, last 30 days, and last 2 weeks alcohol use, 1991 percentages for males and females are slightly less than 1989 percentages, as are rates for driving after drinking and for riding in a car driven by someone who had been drinking.

Rates for lifetime marijuana use among 1991 seniors are significantly less than for their 1989 counterparts. In addition, percentages for seniors on the lifetime Illicit Drug Use Index have decreased significantly.

Looking Ahead

Several additional survey items are helpful in charting direction for the future. One asks students for their

opinion on how drugs affect people; Figure 43 shows the results.

A large majority of students view both using cocaine regularly and also smoking/drinking/using drugs during pregnancy as great health risks. However, less than half of 6th and 8th graders think that smoking 1 or more packs of cigarettes a day, or taking 4 or 5 drinks of alcohol nearly every day is a great health risk. Society's messages on these two drugs are difficult to combat, but efforts need to intensify if the goal is healthy youth development. One encouraging sign is that, in a comparison of these data to 1989 data, we note that on all grade levels the percentages of students who perceive daily cigarette use as 'great risk' has increased (Figure 46).

As was true in the prior study, summer is the time of year when students say peers are most likely to use alcohol and other drugs (see Figure 44). Community task forces working together on prevention strategies for these vacation months could be an important step in addressing this situation.

On the survey, students were asked, "If you were having a problem with alcohol or drugs, to whom would you most likely turn for help or advice?" Percentages are concentrated on the two choices of "parent/guardian" and "friend my age," as shown in Figure 45. Note that parents are consulted less as students get older, and friends are consulted more. Females are much more likely than males to choose "friend my age." The high importance of parents and friends as sources of help speaks to the need for good listening and caring skills and to the need for trustworthy and responsible friends. Whatever can be done in these areas-strengthening interpersonal skills and learning what

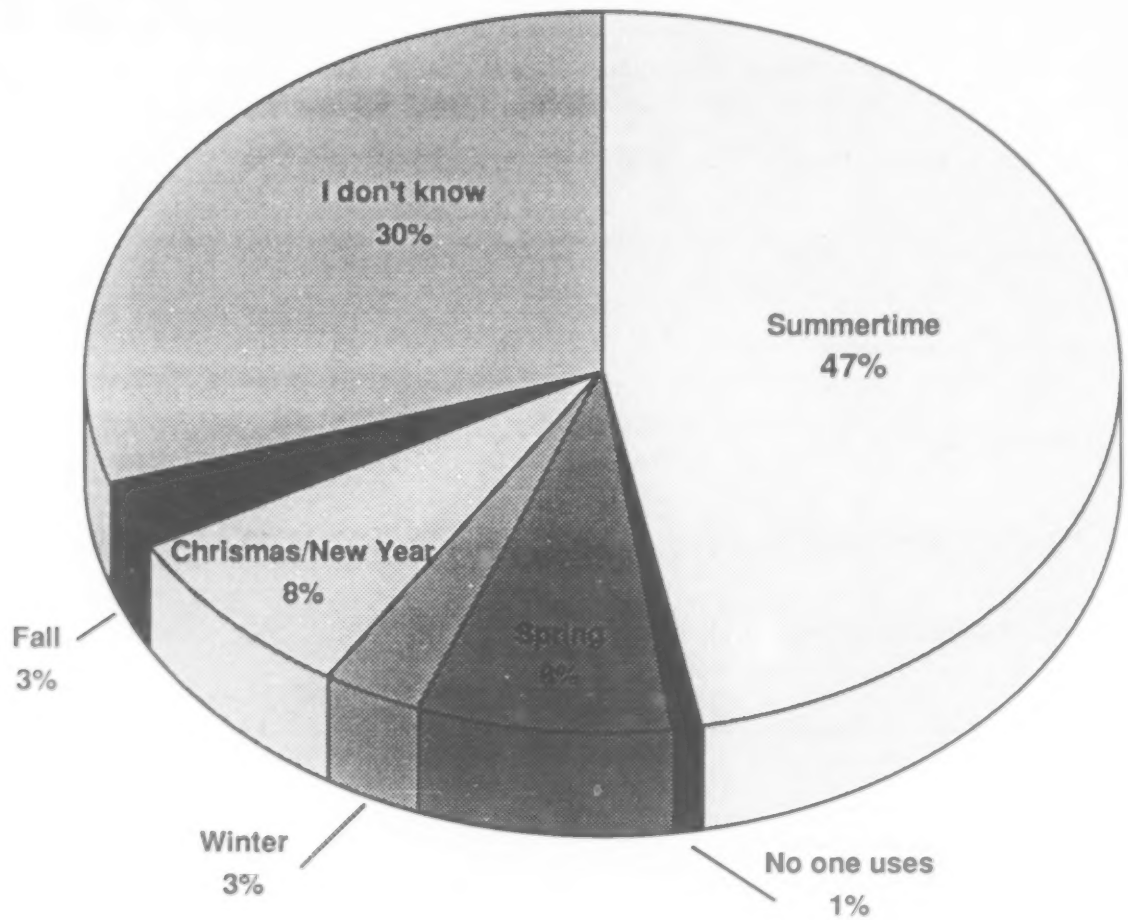
Figure 43: Perception of Health Risk

	Percentage **great risk**					
	Grade (%)				Gender(%)	
	6	8	10	12	M	F
Smoke 1 or more packs of cigarettes a day	40	46	52	61	45	54
Try marijuana once or twice	35	29	22	16	27	24
Smoke marijuana regularly	75	78	73	70	70	78
Try cocaine once or twice	35	39	45	44	43	38
Use cocaine regularly	79	85	92	95	85	91
Smoke 2 or 3 cigarettes every day	15	15	11	13	13	14
Take 4 or 5 drinks of alcohol nearly every day	43	48	60	66	47	61
Smoke, drink, or use drugs during pregnancy	78	85	91	94	84	90
Drive after drinking 2 or more drinks of alcohol	52	59	67	65	55	67
Ride with a driver who has had 2 or more drinks of alcohol	58	65	70	69	60	71

Based on survey items 83-92

Search Institute, 1991

Figure 44: Time of Year Alcohol and Other Drugs Are Most Used



Based on survey item 101

Search Institute, 1991

Figure 45: Sources of Help

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
If you were having a problem with alcohol or drugs, to whom would you most likely turn for help or advice (choose only ONE answer)?						
Parent/guardian	45	27	20	20	33	24
Friend my age	20	34	45	45	30	42
Relative (aunt, uncle, brother, sister)	6	9	8	6	7	8
Priest, minister, rabbi	2	2	2	2	3	1
Teacher or school counselor	10	8	5	5	7	7
Doctor or other medical person	4	3	2	2	3	2
Counselor at office away from school	3	4	3	4	3	4
Parent of friend	1	2	1	1	1	2
Adult neighbor	*	*	*	*	*	*
Youth group leader or coach	1	2	1	2	2	1
Other adult friend (not a relative)	3	3	6	6	3	6
Nobody	5	6	6	6	8	4

* = Less than 1 percent
Based on survey item 105

Search Institute, 1991

Figure 46: Comparisons of Opportunities, 1989 and 1991[1]

	Grade (%)				Gender (%)	
	6	8	10	12	M	F
Probably or definitely will use alcohol in five years						
1989	16	44	67	76	53	51
1991	19	41	64	75	51	49
Probably or definitely will use cigarettes in five years						
1989	7	16	16	17	13	16
1991	13	15	16	15	14	15
Smoking 1 or more packs of cigarettes a day is 'great risk'						
1989	36	41	49	57	43	50
1991	40	46	52	61	45	54
Taking 4 or 5 drinks of alcohol nearly every day is 'great risk'						
1989	39	48	59	70	47	61
1991	43	48	60	66	47	61
Driving after drinking 2 or more drinks of alcohol is 'great risk'						
1989	47	54	64	61	50	63
1991	52	59	67	65	55	67
Parent/guardian as source of help						
1989	48	33	23	20	36	26
1991	45	27	20	20	33	24
Friend as source of help						
1989	17	33	38	48	28	41
1991	20	34	45	45	30	42

[1] See figures 42, 43, and 45 for item content.

Search Institute, 1991

friendship means-will contribute to positive youth development.

Comparisons of Opportunities, 1989 and 1991 (Figure 46)

• On the measure of likelihood of using alcohol in 5 years, percentages for both males and females have declined.

• Fewer 1991 males and females report that they would turn to a parent or guardian for help or advice regarding a problem with alcohol or other drugs.

• For all grade levels, percentages of students perceiving driving after drinking 2 or more drinks of alcohol as "great risk" have increased.

The Wisconsin Connection: Resources for Prevention

In keeping with Search Institute's recommendations, the co-sponsors of the study have published parallel resources that assist schools and communities in following through on action plans for local prevention and intervention programs. For more information on how to obtain any of the publications listed below, please contact DPI's Bureau for Pupil Services at (608)266-8960 or DHSS's Office of Alcohol and Other Drug Abuse at (608)266-2717.

D.P.I.-D.H.S.S.
Joint Study on the Delivery of Alcohol and Other Drug Abuse Prevention and Treatment Service for Youth (September, 1990)

Alcohol and Other Drug Abuse Programs--A Resource and Planning Guide (April, 1991)

D.P.I.-D.H.S.S.
Joint Youth Alcohol/Drug Abuse Plan (1991-1993)

Student Assistance Program Team Training Manual (February, 1991)

XV. THE NATIONAL PICTURE

The design of effective prevention strategies requires an understanding of the factors that encourage young people to avoid health-compromising choices. A recent national study, reported in *The Troubled Journey: A Portrait of 6th-12th Grade Youth*,[1] identifies 30 characteristics of youth and the environments that surround them (family, school, church or synagogue, community) that appear to discourage alcohol and other drug use, as well as other forms of at-risk behavior. In this chapter, we describe these 30 characteristics, which are called assets, and document their preventative power. These 30 assets provide a kind of blueprint for designing effective prevention strategies.

The Troubled Journey is a composite report based on a survey of 47,000 6th-12th grade public school students in 111 communities in 25 states. In most communities, the survey was administered to all public school students. In a few large cities, the survey was administered to random samples of students. In all locations, the survey was administered by school staff, employing standardized procedures outlined in a comprehensive administration manual. Special efforts were taken to guarantee anonymity to each participating student.

The sample is composed mainly of students in the Midwest, in communities under 100,000 in population. This

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[1]Benson, P. L. (1990). *The Troubled Journey: A National Portrait of 6th-12th Grade Youth*. Minneapolis: Lutheran Brotherhood. To obtain, send $4 to Lutheran Brotherhood, 625 Fourth Avenue S., Box 855, Minneapolis, MN 55415.

portrait, then, focuses on middle America, and from a demographic point of view provides a relatively good fit to towns and cities in Wisconsin. The data in this chapter, however, are not from the Wisconsin Drug Study.

Assets Required for Positive Youth Development

A basic premise underlying *The Troubled Journey* is that effective prevention of alcohol and other drug use, as well as prevention of other at-risk behaviors, includes promoting a set of assets required for positive youth development. Positive development requires constant exposure to interlocking systems of support, control, and structure. In the ideal, young people-via schools, families, community organizations, and religious institutions-constantly interact with caring, principled adults. These patterns of support, control, and structure function as **external** assets, providing young people with webs of safety and love important for stimulating and nurturing healthy development.

Adolescence is the bridge between a childhood surrounded by networks of external support, and adulthood, in which these networks are partially supplanted by the internal checks and balances that enable the individual to make wise choices when beyond the reach of childhood's protective cocoon. It is of primary importance, then, to nourish-particularly during adolescence-a range of **internal** assets. They are the commitments, values, and competencies that help an individual thrive competently and responsibly when "on one's own."

Figure 47 lists and defines the 30 assets measured in this national study. Sixteen of them are external assets, grouped into the 3 categories of support, control, and structured time use. Fourteen are internal assets, clustered into educational commitment, positive values, and social

Figure 47: External and Internal Assets, Definitions

	ASSET TYPE	ASSET NAME	ASSET DEFINITION
EXTERNAL	Support	Family support	Family life provides high levels of love and support
		Parent(s) as social resources	Student views parent(s) as accessible resources for advice and support
		Parent communication	Student has frequent, in-depth conversations with parent(s)
		Other adult resources	Student has access to non-parent adults for advice and support
		Other adult communication	Student has frequent, in-depth conversations with non-parent adults
		Parent involvement in schooling	Parent(s) are involved in helping student succeed in school
		Positive school climate	School provides a caring, encouraging environment
	Control	Parental standards	Parent(s) have standards for appropriate conduct
		Parental discipline	Parent(s) discipline student when a rule is violated
		Parental monitoring	Parent(s) monitor "where I am going and with whom I will be"
		Time at home	Student goes out for "fun and recreation" 3 or fewer nights per week
		Positive peer influence	Student's best friends model responsible behavior
	Structured Time Use	Involved in music	Student spends 1 hour or more per week in music training or practice
		Involved in school extracurricular activities	Student spends 1 hour or more per week in school sports, clubs, or organizations
		Involved in community organizations or activities	Student spends 1 hour or more per week in organizations or clubs outside of school
		Involved in church or synagogue	Student spends 1 hour or more per week attending programs or services
INTERNAL	Educational Commitment	Achievement motivation	Student is motivated to do well in school
		Educational aspiration	Student aspires to pursue post-high school education (e.g., trade school, college)
		School performance	Student reports school performance is above average
		Homework	Student reports 6 hours or more of homework per week
	Positive Values	Values helping people	Student places high personal value on helping other people
		Is concerned about world hunger	Student reports interest in helping to reduce world hunger
		Cares about people's feelings	Student cares about other people's feelings
		Values sexual restraint	Student values postponing sexual activity
	Social Competence	Assertiveness skills	Student reports ability to "stand up for what I believe"
		Decision-making skills	Student reports "I am good at making decisions"
		Friendship-making skills	Student reports "I am good at making friends"
		Planning skills	Student reports "I am good at planning ahead"
		Self-esteem	Student reports high self-esteem
		Positive view of personal future	Student is optimistic about his/her personal future

Based on Benson, P. (1990). *The troubled journey: A national portrait of 6-12th grade youth.* Minneapolis: Lutheran Brotherhood.

Search Institute, 1991

competencies. These 30 are a good starting point for naming the ingredients necessary for positive youth development. They were chosen, in part, because each is considered readily alterable-that is, it can be promoted in communities, given a certain will and commitment.

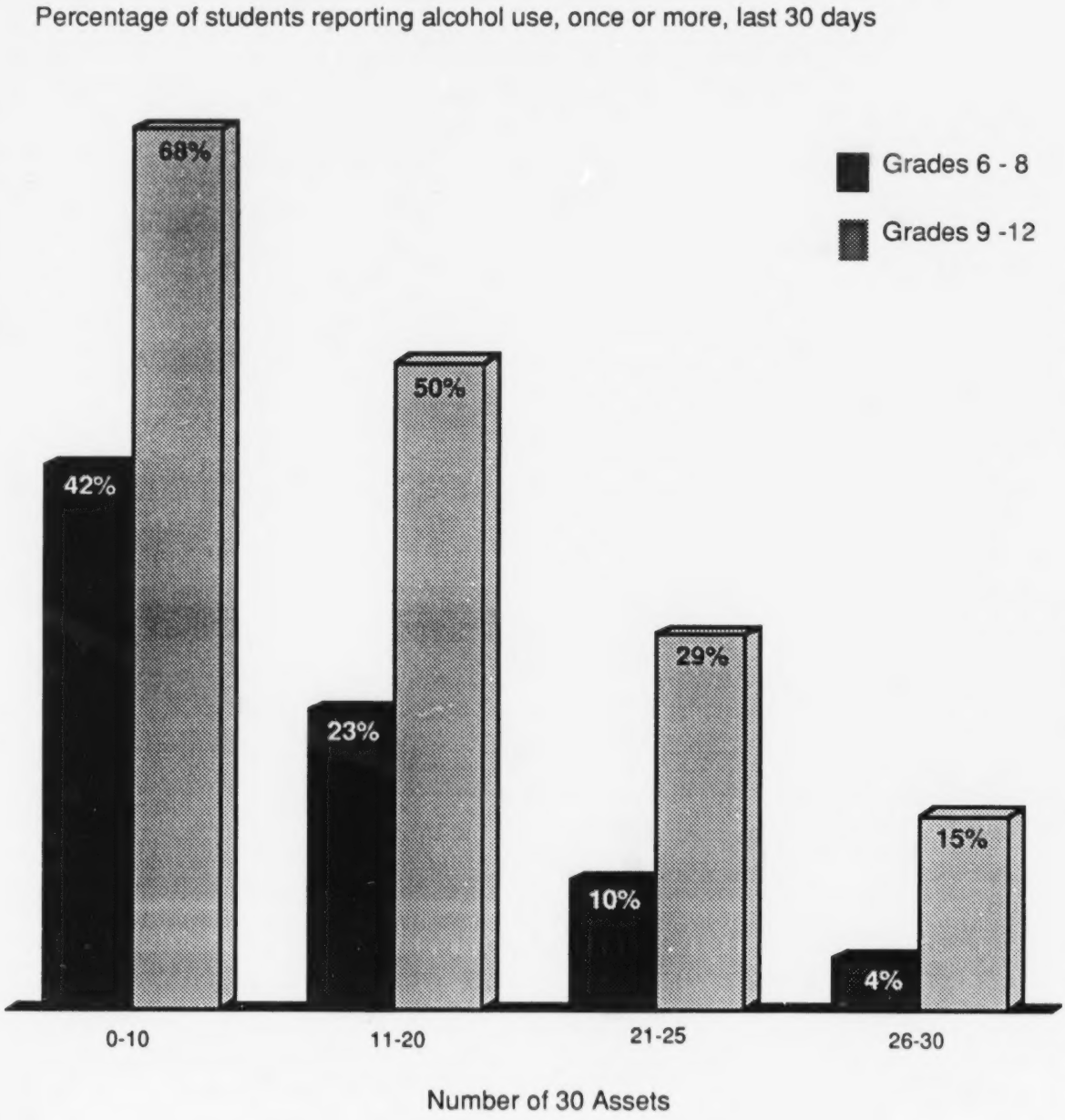
However, the list is not exhaustive. One asset not included is more intractable. It is economic security, the absence of which inhibits the kinds of nutrition, housing, and life experiences crucial for positive development. The United States leads the industrialized world in the percentage of children raised in poverty. In contemplating how to maximize positive youth development, there is no more urgent task than finding solutions to this persistent dilemma.

The Preventative Power of the 30 Assets

Among the 47,000 public school students in this national study, the assets are additive: the more one has, the less the at-risk behavior. As shown in Figure 48, rates for alcohol use "during the last 30 days" are cut dramatically when the number of assets youth have increase. Among 6th-8th graders, for example, students who have 10 or fewer assets have a 42 percent chance of reporting alcohol use. This rate decreases to 23 percent for students with 11-20 assets, to 10 percent for those with 21-25 assets, and to 4 percent when assets number 26 or more. Overall, each increment in assets appears to cut alcohol use in half.

Similar patterns are found for binge drinking (Figure 49). Among 9th-12th graders, 50 percent of students with 10 or fewer assets report binge drinking (5 or more drinks in a row) at least once "during the last 2 weeks." The rate shrinks to 4 percent for those with 26 or more of the 30 assets.

Figure 48: Alcohol Use, by Number of 30 Assets

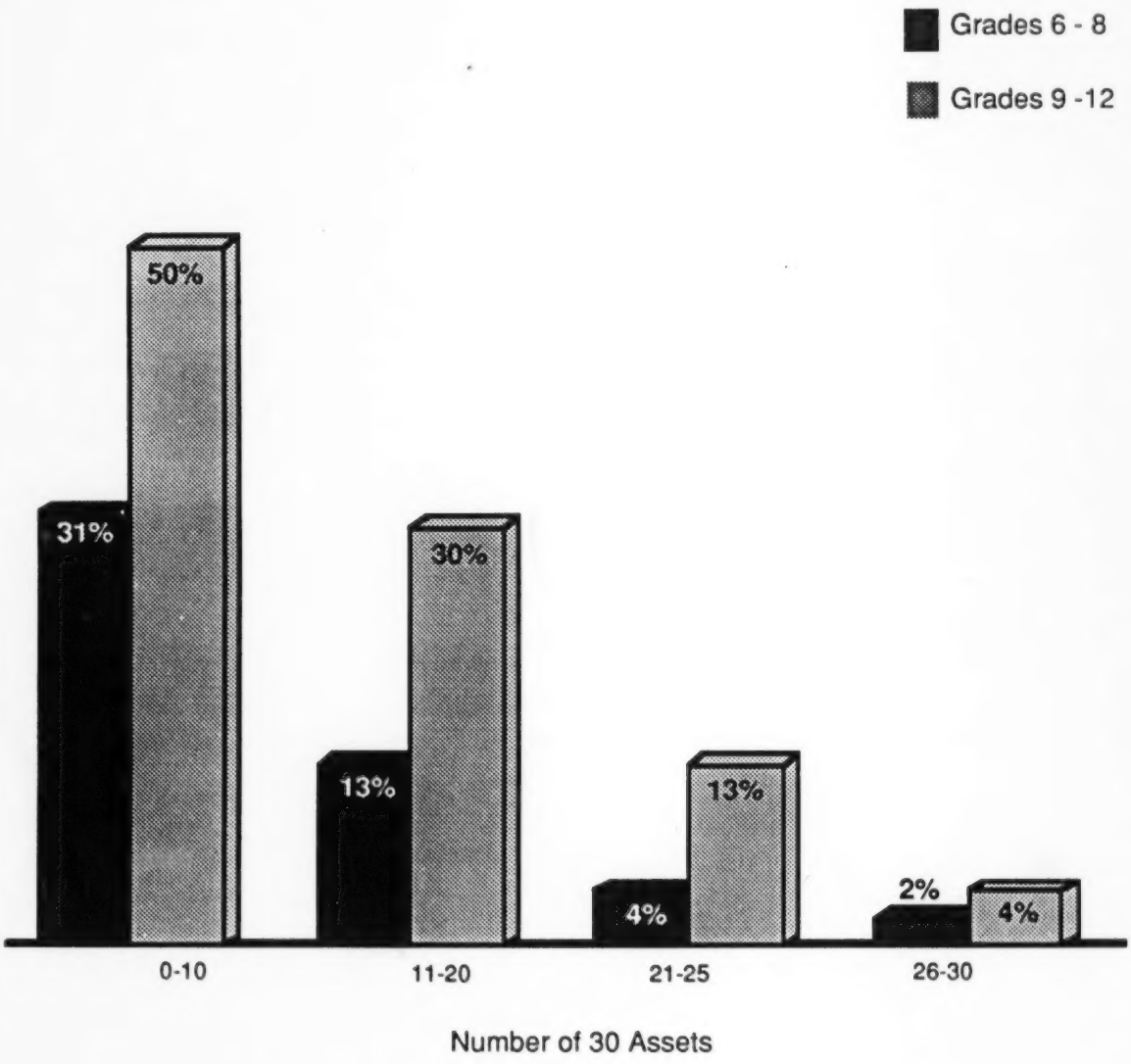


Based on Benson, P. (1990). *The Troubled Journey: A National Portrait of 6-12th Grade Youth.* Minneapolis: Lutheran Brotherhood.

Search Institute, 1991

Figure 49: Binge Drinking, by Number of 30 Assets

Percentage of students reporting binge drinking (5 or more drinks in a row), once or more, last 2 weeks



Based on Benson, P. (1990). *The Troubled Journey: A National Portrait of 6-12th Grade Youth.* Minneapolis: Lutheran Brotherhood.

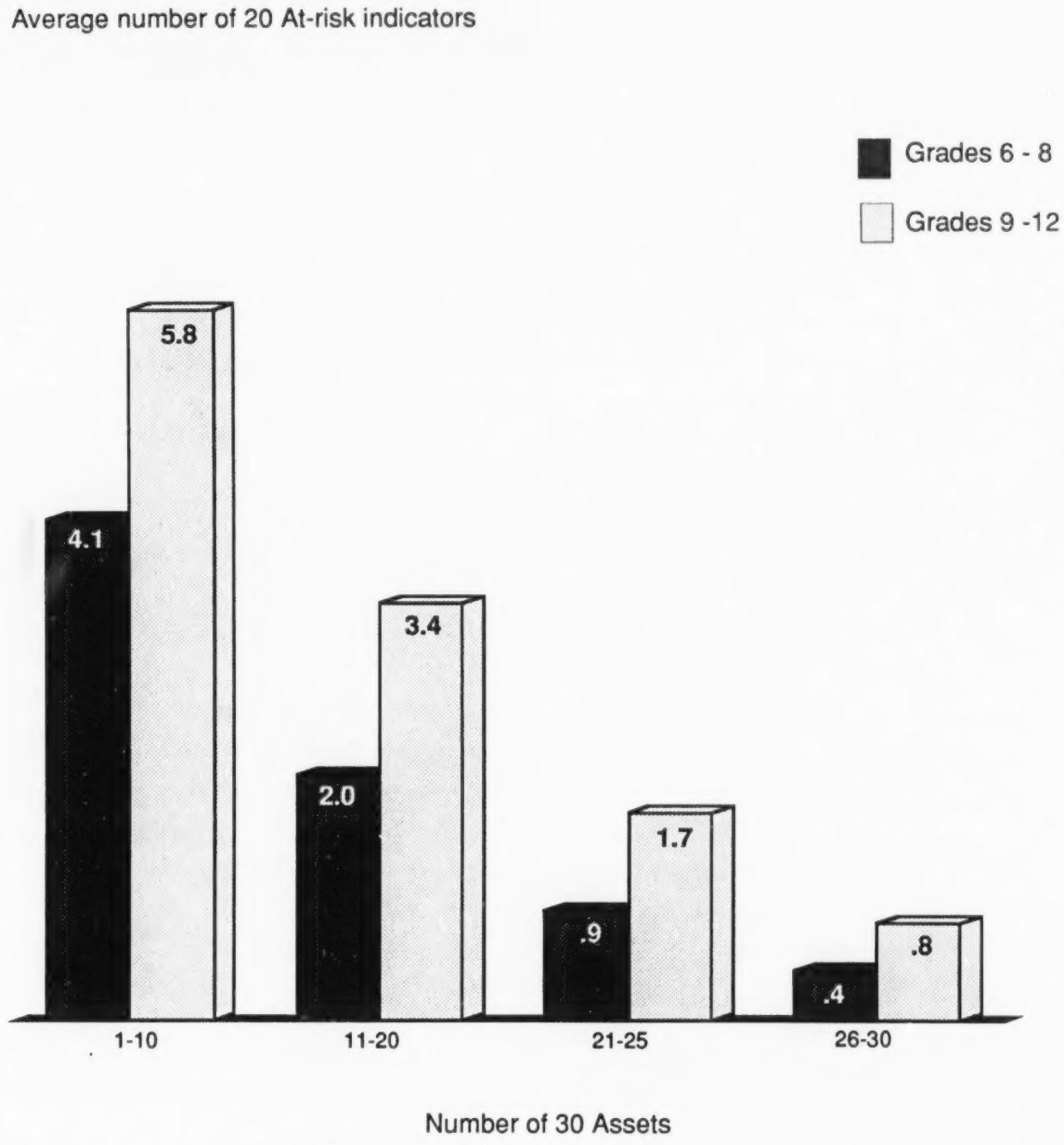
Search Institute, 1991

The assets have this strong relationship to many forms of at-risk behavior, including premature sexual activity, illicit drug use, tobacco use, anti-social behavior, and school failure. *The Troubled Journey* documents 20 different indicators of at-risk behaviors. As shown in Figure 50, each increment in assets tends to cut in half the average number of the 20 indicators students evidence.

Accordingly, a focus on the 30 assets can assist a community in preventing not only alcohol and other drug use but other forms of health-compromising behavior as well. It is of particular importance, then, to note that many of the assets are not commonly experienced by students. Among the 47,000 public school students, the average 6th-12th grader has only 16.3 of the assets. The range is from a high of 17.4 in grade 6 to a low of 15.9 in grade 12. Of the 30 assets, 15 are experienced by less than half of the national sample. These 15 (with the percentage of all youth with each asset) are as follows:

Other adult resources	49%
Parent communication	48%
A value on helping people	48%
School performance	46%
Parent as social resource	45%
Self-esteem	45%
Concern for world hunger	43%
Other adult communication	42%
Involvement in community organizations	39%
A value on sexual restraint	35%
Positive school climate	30%
Positive peer influence	30%
Involvement in music	27%
Homework	26%
Parental involvement in schooling	26%

Figure 50: At-risk Behavior, by Number of 30 Assets



Based on Benson, P. (1990). *The Troubled Journey: A National Portrait of 6-12th Grade Youth.* Minneapolis: Lutheran Brotherhood.

Search Institute, 1991

The Challenge

Part of our current national dilemma in protecting youth from health-compromising behaviors such as teenage pregnancy, frequent alcohol use, and illicit drug use (the rates for which, in the United States, are among the highest in the industrialized world) may have to do with this portrait of assets. One reaonable national goal is to ensure that each adolescent experiences 20 or more of the 30 assets. As shown below, no student subgroup in this national study evidences meeting this minimal standard. The gap between the real and the ideal is more pronounced for males than females.

Student Subroup	Percent(%) with 20 or More of the 30 Assets
Grade 6	35
Grade 7	36
Grade 8	32
Grade 9	27
Grade 10	26
Grade 11	24
Grade 12	25
Females	34
Males	22

Recommendations

This portrait of assets necessary for positive youth development, coupled with evidence that the assets prevent health-compromising choices, has implications for the design

of effective prevention strategies. Four recommendations follow.

1. In local communities, prevention should be understood as not only teaching young people about the perils of alcohol and other drug use, but also as promoting the kinds of support and control mechanisms necessary for personal well-being. Accordingly, much of the important work of prevention occurs without directly talking about alcohol and other drugs. While such direct conversation about chemical use is important, it is unlikely to have a strong impact in and of itself. It is the combination of building assets and directly addressing alcohol and other drug use that will have the strongest impact on students.

2. A community plan should be developed that creates a vision of the assets it seeks to develop among its youth and that directs focused attention to assets that are not commonly in place.

3. And in each and every community, all sectors of community life--families, schools, churches, synagogues, mosques, community agencies, government, business--must feel committed and empowered to collaborate on the important task of building assets and reducing risks.

Those communities that develop a shared vision of positive youth development and encourage cross-sector collaboration will likely experience a proliferation of assets and a concomitant reduction in risky choices.

APPENDICES

APPENDIX A

Sample Characteristics of the 1988-89 Wisconsin Study on Alcohol and Other Drug Use

Figure 1: 1988-89 Wisconsin Sample Characteristics

	Sample Size	Percent of Total Sample
Total	6,222	100
Grade*		
6	1,510	24
8	1,484	24
10	1,516	24
12	1,701	27
Gender*		
M	3,113	50
F	3,062	50
Community Size*		
Under 2,500	2,131	34
2,500 - 9,999	637	10
10,000 - 49,999	970	16
50,000 or over	2,460	40
Race/Ethnicity*		
American Indian	110	2
Asian or Pacific Islander	62	1
Black or African American	380	6
Latino or Hispanic	81	1
White	5,462	89
Bi-racial or bi-cultural	64	1

* Total does not sum to 6222 due to missing data.

Search Institute, 3/89

APPENDIX B

Technical Appendix
on Confidence Intervals

MARGIN OF ERROR

In a survey of this type, both sampling and non-sampling errors can influence the results. Dividing the sample up according to region or some other important characteristic, a process known as stratification, reduces the "margin of error," or sampling error. Comparisons of groups that cut across all schools, such as gender and grade comparisons, also reduce the sampling error. On the other hand, the practice of randomly picking schools in a given area, and then surveying all the students in that school, has a higher sampling error (due to what are called homogeneity effects) than would a survey that went house-to-house and interviewed the people of school age. The point here is that the various choices made in how to draw the sample and conduct the survey will have a variety of positive and negative influences on the resulting sampling error.

Non-sampling errors can also have an influence on the accuracy of the sample. Ambiguously written survey items obviously make interpretation of the answers problematic. Differences between those who agree to participate and those who refuse can influence the findings. Even differences in the way people give answers can influence findings. These difficulties affect ALL surveys, national and local, regardless of how good the sample is. They cannot be "controlled"; they must simply be kept in mind when interpreting the findings.

In light of the sampling procedures and sample size in the current study, the margin of error for this survey is small--plus or minus 1.3 percent for data based on the total sample, plus or minus 2.6 percent for data on a specific grade level, and plus or minus 1.8 percent for data on a

given gender. It is comparable to the margin of error reported for major national surveys by Gallup and Roper.

One additional caution must be kept in mind. The fact that two things are "statistically" different does not mean that the difference has practical significance. A $1 million educational program that reliably increased its participants' vocabulary by only three words compared to those who did not participate would not be of much use, regardless of how "statistically significant" the difference was. In the same way, once the sample is drawn, the data are in, and the margin of error for the sample has been calculated, one must face the question, "How big a difference is really different?"

For this study, it would be best to consider that two percentages are different only if they differ by 5 percent or more. This guideline can be applied to differences based on comparisons by grade or gender as well as those for the total sample. This "5 percent rule" is the suggested lower limit for differences that have practical importance.